



# CONCORD MUNICIPAL LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

**Date:** August 7, 2024  
**To:** Municipal Light Board: Warren Leon (Chair), John Dalton, Brian Foulds, Alice Kaufman, and Bianca Taylor  
**From:** Jason Bulger, Interim CMLP Director, CTO  
**Subject:** Agenda for Virtual Light Board Meeting on **August 14, 2024 at 7:30 A.M.** (Zoom link below)

7:30 AM 1. **Call to Order**

7:30 AM 2. **Meetings and Minutes** 5 Minutes Chair

- Vote to accept the minutes of July 10, 2024.
- Vote to accept but not release the executive session minutes from April 24, 2024.

Upcoming Meetings:

Sep 11, 2024; Oct 9, 2024; Nov 13, 2024; Dec 11, 2024\*; Jan 8, 2025; Feb 12, 2025

\*Note: We usually have two meetings in December; one to review the budget and one to approve the budget.

7:35 AM 3. **Directors Update** 15 Minutes Director Information

7:50 AM 4. **Broadband Update** 5 Minutes Director Information

7:55 AM 5. **Customer Satisfaction Survey** 30 Minutes Director Discussion

Background: Earlier this year, CMLP contracted with GreatBlue to conduct a survey of customer satisfaction. The full results have been compiled.

Purpose: To review a presentation from GreatBlue summarizing the findings and recommendations that resulted from the survey.

8:25 AM 6. **NEPOOL GIS REC Calculation Method** 10 Minutes Director Discussion/Vote

Background: The NEPOOL Generation Information System currently tracks the creation of Renewable Energy Certificates (RECs) on a monthly basis. A working group has recommended that they modify the software to allow an hourly tracking of RECs.<sup>1</sup>

Purpose: Discuss the topic and take a vote on how to instruct the Interim Director to advise CMLP's NEPOOL representative how to vote on this matter.

8:35 AM 7. **Paperless Billing** 15 Minutes Director Discussion/Vote

Background: CMLP spends over \$60,000/yr on printing and mailing paper bills despite having a robust electronic billing system. There is currently no charge for receiving a printed bill and no credit for those who opt for paperless billing.

Purpose: To consider and vote on a proposal to create a credit for those who opt in to paperless billing.

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<sup>1</sup> [https://www.iso-ne.com/static-assets/documents/100013/a04\\_mc\\_2024\\_07\\_09-10\\_mc\\_memo\\_hourly\\_changes.pdf](https://www.iso-ne.com/static-assets/documents/100013/a04_mc_2024_07_09-10_mc_memo_hourly_changes.pdf)



# CONCORD MUNICIPAL LIGHT PLANT

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- 8:50 AM 8. **AEGIS Assessment & Recommendations** 15 Minutes Director Information  
Background: Earlier this year, CMLP volunteered for an assessment by AEGIS, our excess insurance provider.  
Purpose: Hear a summary of the assessment and its recommendations; learn how CMLP plans to act based on these recommendations.
- 9:05 AM 9. **Liaison & Public Comments** 5 Minutes Chair Information
- 9:10 AM 10. **Adjourn**

Distribution: Select Board (1 copy)

Kerry Lafleur	Carole Hilton	Joe Repoff	Matt Cummings
Jan Aceti	Laura Scott	Cameron McKennitt	Eric Simms
Jason Bulger	Karlen Reed	Michael Hale	Jeff Cosgrove

Join Zoom Meeting

<https://us02web.zoom.us/j/83853970051?pwd=akVzemJRQk8vNTJRUnNlOS9NNDlFbUQ0T09>

Meeting ID: 838 5397 0051

Passcode: 661712

One tap mobile

+16469313860,,83853970051#,,,,\*661712# US

+13017158592,,83853970051#,,,,\*661712# US (Washington DC)

Find your local number: <https://us02web.zoom.us/u/kbA1MReajb>

**Link to view recordings of previous Light Board Meetings:**

<https://www.youtube.com/@MinutemanMediaNetwork/search?query=Concord%20Light%20Board>

**Link to view the Director's Updates:**

<https://concordma.gov/1106/Municipal-Light-Board>

**Link to view the Broadband Monthly Updates:**

<https://www.concordma.gov/3148/Monthly-Updates>

# Concord Municipal Light Plant Updates

August 14, 2024

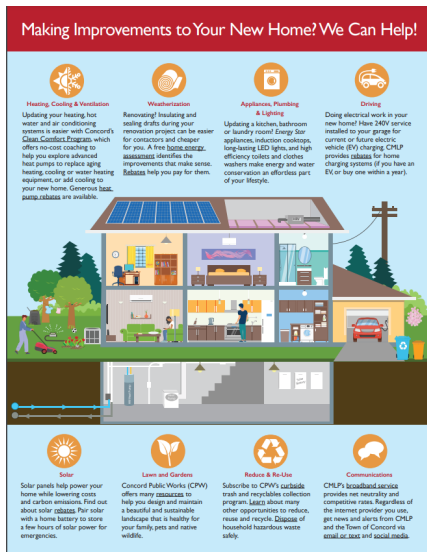
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## Organization, Transition, and Industry

- Recruitment for the permanent Director continues. The Town Manager sent an update to CMLP staff and the Light Board on current efforts, and interviews are being scheduled for the last week of August.
  - The Light Board will likely meet in open session in early September to meet the finalists.
- The legislative session on Beacon Hill ended with a bit of disappointment. Neither the economic development bill nor the energy/climate bill passed. They are contemplating a special legislative session to tackle these issues.
- The Interim Director attended ENE’s quarterly board meeting in Falmouth (early August). This included updates on ENE’s business sectors as well as the latest regulatory information and industry direction on clean energy projects.
- The Netwatch project has moved forward with coordination between Engineering, Line, and Broadband divisions to get access to the existing camera feeds and install new two-way speakers at the three locations.
- While our auditors have been behind schedule, we hope to have the financial audit wrapped up in the next few weeks. It will be presented to the Financial Audit Advisory Committee at a future meeting.

# Energy Management



- CMLP staff updated [a 2-page flyer](#) that we provide to new electric account holders, letting them know how CMLP and DPW programs can help them enhance the sustainability of their new home as they make improvements to it. We added text about CMLP's electric lawn mower rebate program and updated the links to various resources. The flyer also mentions communication options available to newcomers, including CMLP's broadband service, and news and emergency alerts from the Town.
- CMLP has signed a contract with Abode Energy Management for a limited scope of ongoing services, including use of their heat pump quote comparison tool and for technical advice on appropriate equipment

design and sizing or heat pump technology, as needed.

- Working with the Town's IT staff, we have transferred files related to our coaching service and rebate programs from an Abode-hosted Google Drive and a pandemic-era One Drive account to a new Energy Management SharePoint workspace.
- The Cambridge Housing Authority has secured a \$1.3M grant to purchase and install heat pumps at the 52-unit Everett Gardens property from the Massachusetts Executive Office of Housing and Livable Communities. CMLP has provided information about our commercial heat pump rebate program to CHA in case it is needed to supplement the funds they've received from the state.
- Energy Management staff completed one of two annual Municipal Action Plan submissions to DOER, in which we list prior year expenditures and participation by program.
- CMLP and Energy New England are planning an EV Showcase, which will take place at Bradford Mill in West Concord on September 14th from 1 – 4 PM. Attendees will have a chance to explore a wide range of electric vehicle models, including sedans, SUVs, and cutting-edge electric trucks, as well as e-bikes. They'll be able to chat with current EV owners to learn about their firsthand experiences, and consult with our EV Specialists about charging infrastructure, range capabilities, and cost savings on fuel and maintenance. Starting in mid-August, CMLP and ENE staff will be publicizing the event through a variety of avenues, including community

**Curious about Electric Vehicles?**

Join us at the...  
**Concord EV Showcase!**

**Saturday, Sept 14th 1 - 4pm**  
*Rain date: Sunday Sept 15*

**23 Bradford St, West Concord**  
*Parking at 43 Bradford St*

Curious about owning an electric vehicle? Join us for an exciting EV showcase! Explore various models, chargers & e-bikes. Chat with owners and experts to answer all of your questions.

Concord Drives Electric | ConcordDrivesElectric.org | CONCORD MUNICIPAL LIGHT PLANT

organizations, print and social media, bill inserts and messages and a postcard sent to all households in town.

## Battery Storage and Solar Project Updates

- With the Board's blessing, we continue to meet with Kearsarge to understand the options surrounding the expansion of solar (by up to 2.7MW).
- We will likely move forward with a system study in that area to determine how much solar can be absorbed and how much power the infrastructure can handle.
- We are hearing that some current and many future battery containers are much denser, with some 20' containers having up to 5MWh of energy storage. This will help us at sites like W.R. Grace, where there is not a lot of extra room.
- We have a meeting scheduled to discuss required studies by ISO-NE for these projects.

## Power Supply and Rates

- On Thursday, August 1, ISO New England experienced a scarcity event. The ISO has not released the full scarcity report, but this event was caused by slightly higher demand than expected plus a few plants being unexpectedly offline. It started a little before 5pm and ended 5 hours later. Fines will be assessed to generators with unplanned outages.

## Middle School Solar/Energy Storage

- Solar/PV conduit is 2/3 complete. In the picture below, you can see where the conduit for the canopies is trenched.



- We are close to legal review for the solar/battery RFP. At this point, we are waiting for SDA to give us a few additional technical requirements. Baker Tilly has given us the pertinent information relating to the elective pay.

# Advanced Metering Project Updates

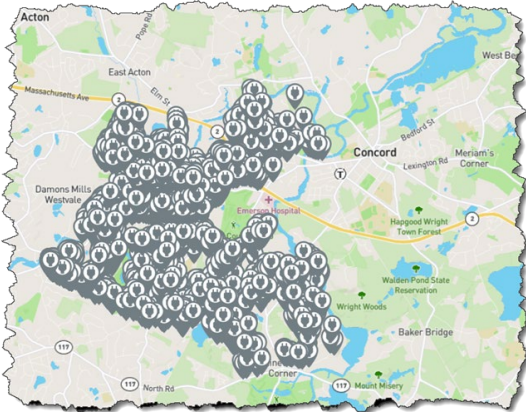


Figure 1: Advanced meters installed - May 2024

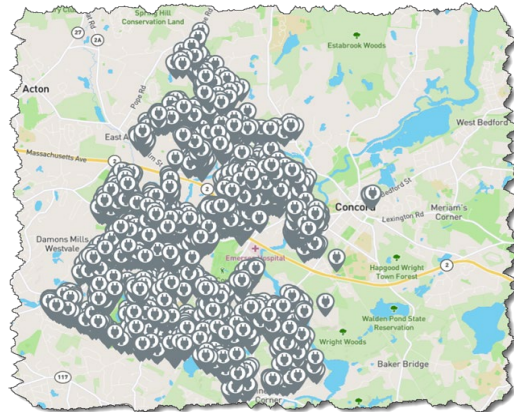


Figure 2: Advanced meters installed - June 2024

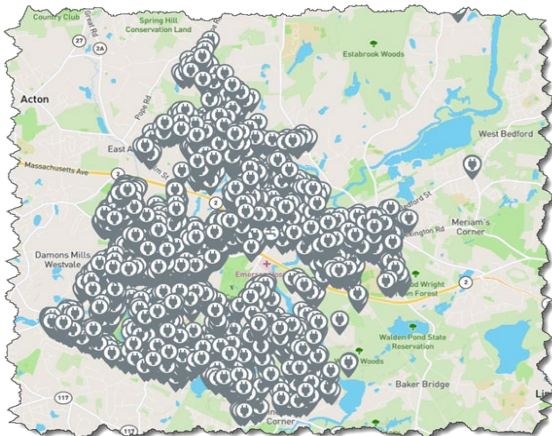


Figure 3: Advanced meters installed - July 2024

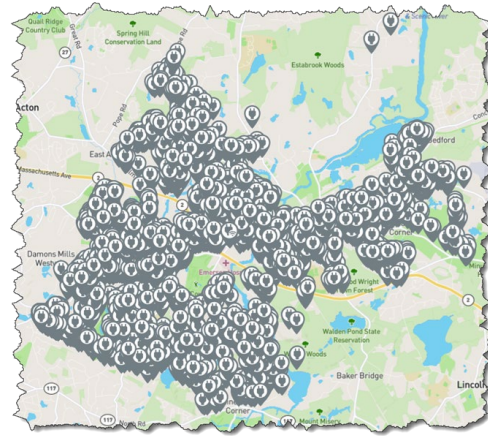
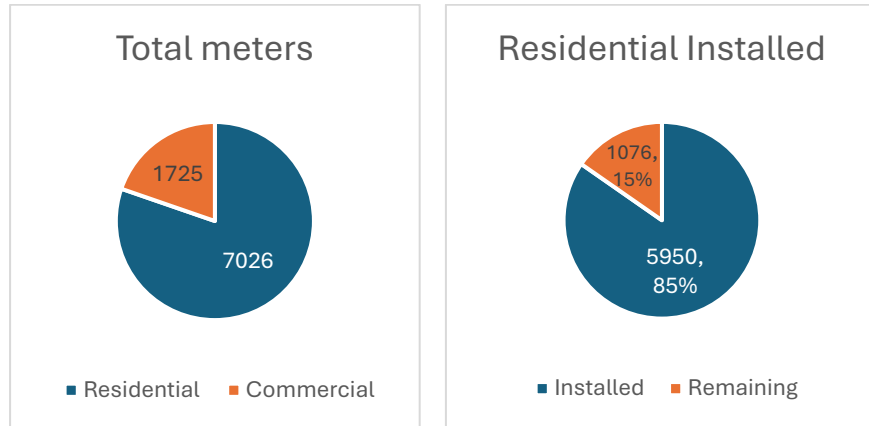


Figure 4: Advanced meters installed - August 2024

- We have between one and two external crews of two electricians installing advanced meters.
- CMLP's electrician has installed approximately 272 load control relays or 65% for customers who participate in our load control programs (roughly 420 customers) including water heaters and electric thermal storage heaters.
- The Metering and Customer Service division celebrated crossing the 75% mark of residential meter installs by inviting the contractors in for fresh fruit and homemade cupcakes.



- We have installed about 700 meters since the July 10, 2024 Light Board meeting.
- To date, 33 customers have opted out of AMI meters (across the Town, not just of deployed areas).
- Our Broadband Manager, Dale Hartling, has made many positive strides getting IP Link meters available and ready for deployment. These meters can act as additional gateways, speeding up meter reads and covering if a traditional gateway goes down.

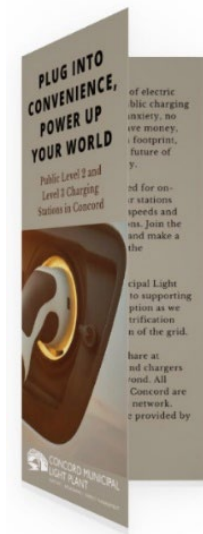


## Engineering and Operations

- The SCADA project is moving forward with contract discussions happening between legal teams. Once complete, we will move to purchase following Chapter 164 procurement rules.
- SEL performed a microgrid demonstration of their product that can take in data from our relays and new SCADA equipment and effectively balance local grid resources with demand from our customers. A controller like this will be instrumental as we continue to look at clean energy and energy storage sources within Concord. This is the third microgrid controller demo we have participated in.
- The team is wrapping up accessibility work on the Level 3 chargers at Rideout Park. This work will get us to 100% compliance with the grant and ensure accessibility.
- Josh and others have made repairs to our water holding tank to restore alarm connectivity and allow for regular inspections.
- CMLP has taken to maintaining more of our grounds and uses exclusively electric products, which have adequate power and range to mow and landscape.

## Customer Service / Metering

- We are recruiting for a Customer Services Specialist position to backfill for Anne Stevens who retired in July. We completed second interviews and have extended an offer to a candidate.
- We received 1,042 survey responses (with a goal of 400!). The findings will be reviewed at the August Light Board meeting.
- Disconnects for nonpayment have been minimal this summer (0-1 for last 2 months). Our new process of delivering disconnect door tags the day prior to the disconnect date has been successful, giving customers more notice and time to pay.
- A new flyer highlighting Concord's electric car chargers was produced by Carole, our Customer Service Manager. It can be distributed around town or left at hotels to educate visitors on the location and cost structure of our chargers. Once the final version is proofed, we will send it to the printers and work with volunteers to circulate it.





# TOWN OF CONCORD MUNICIPAL UTILITIES

ELECTRIC | WATER | SEWER | TELECOMMUNICATIONS

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## July 2024 – Broadband Updates

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Concord Broadband is pleased to share the following updates and information from the past month. Please do not hesitate to contact us at [broadband@concordma.gov](mailto:broadband@concordma.gov) should you have any questions, concerns, or feedback.

### Operations

CMLP has hired a second Network Engineer! The candidate will start on September 4, 2024, and we could not be more excited. There are several big projects we are eager to work on, including the upgrade of our GPON technology to XGS-PON.

We have submitted our biannual reporting for the FCC per the Broadband Data Collection (BDC) program. The reporting periods end 6/30 and 12/31. We work collaboratively with the Town's GIS department to get shapefiles that show our availability and customer accounts by speed in each census tract. This data eventually populates the National Broadband Map here: <https://broadbandmap.fcc.gov/home>

Our big municipal data network cutover is scheduled for September 7th. This project is the culmination of years of work with planning, procurement, and configuration. Several staff members will be on hand to conduct the cutover. The result will be faster, more secure, and more resilient. As a bonus, it will be more separated than ever from the Broadband network.

### IP Link Meters

When CMLP moved to an Advanced Metering Infrastructure (AMI), they selected a vendor that could make use of our robust fiber network by connecting to deployed ONTs in the field. Doing this would add connectivity by augmenting existing gateways to allow for meter traffic to flow back to the main server. It has the advantage of being a backup if a gateway were to go down and also increase the speed of the data back to the server. This helps with outage notifications and allows customers to get more real-time data from their meter.

To make this work, though, it required engineering a new solution for connectivity and a staging server to collect that data using a different protocol than other meter data. Dale, our Broadband Manager, did a great job working through this project to allow connectivity. Our Metering Supervisor Annie, Senior Master Electrician Marty and other Customer Server staff helped test and coordinate the project with the vendor. Thank you to all who are making this a successful project!

### Upcoming Maintenance

Our next scheduled maintenance will take place on Saturday, September 7, 2024. We do not expect any customer impact, but we are advertising this as a maintenance window in the unlikely event there is an impact to customers.

We will post more information about this and other maintenance windows here:

<https://concordma.gov/3144/Broadband-Maintenance>

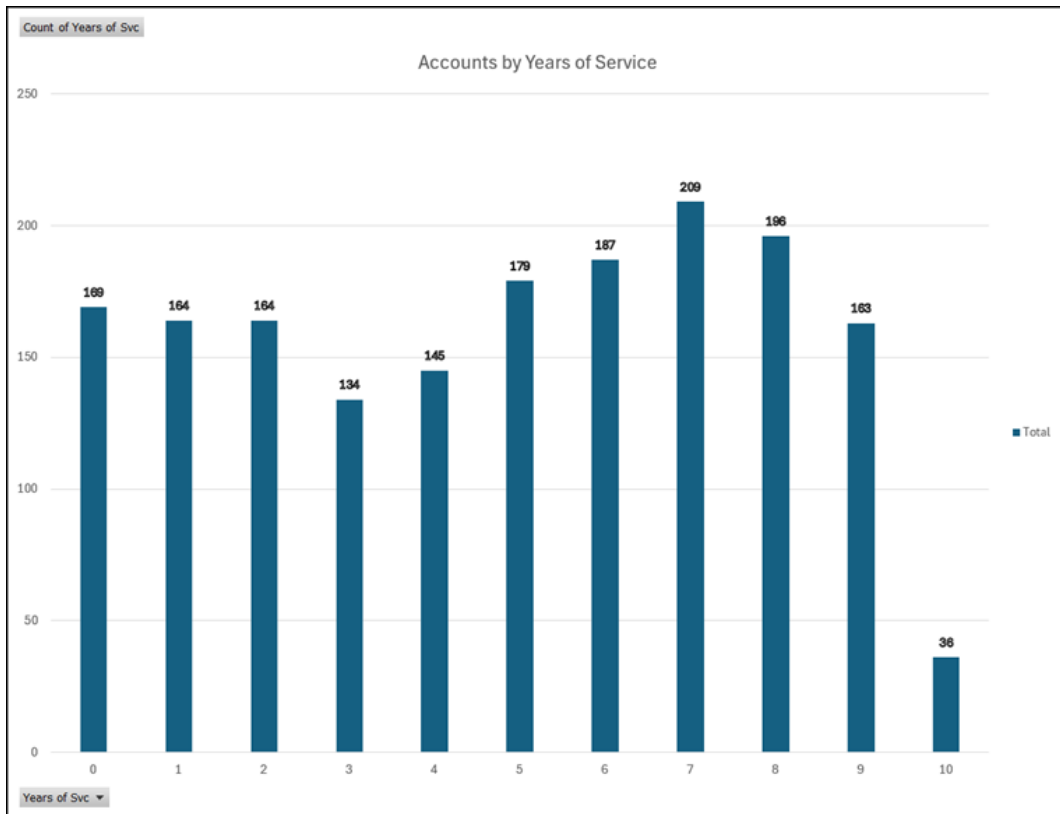
## New Internet Service Provider

Concord Broadband has three ISPs for a total of 21GB/s of guaranteed service. To ensure adequate redundancy, we need to increase that speed to 30GB/s, and fortunately our Broadband Manager has found an excellent opportunity to save a little bit of money each month and allow that 30GB/s to burst up to 120GB/s. This will work nicely with our new XGS-PON offerings and allow us some enterprise customers that need a dedicated 5 or 10GB/s service.

The contract is in legal review, and once the order is complete, we expect service within 30 days. We also found an opportunity to, as the lessor, lease some dark fiber at the same time, which is positive.

## Customers and their longevity

Concord Broadband customers are quite happy with their service. We capture data on why people leave, and it is incredibly rare to have customers leave for a reason other than a departure from their residence or business. We thought it would be interesting to take a look at customer longevity by years of active service. With 10 years in business, we have quite a lot of data!



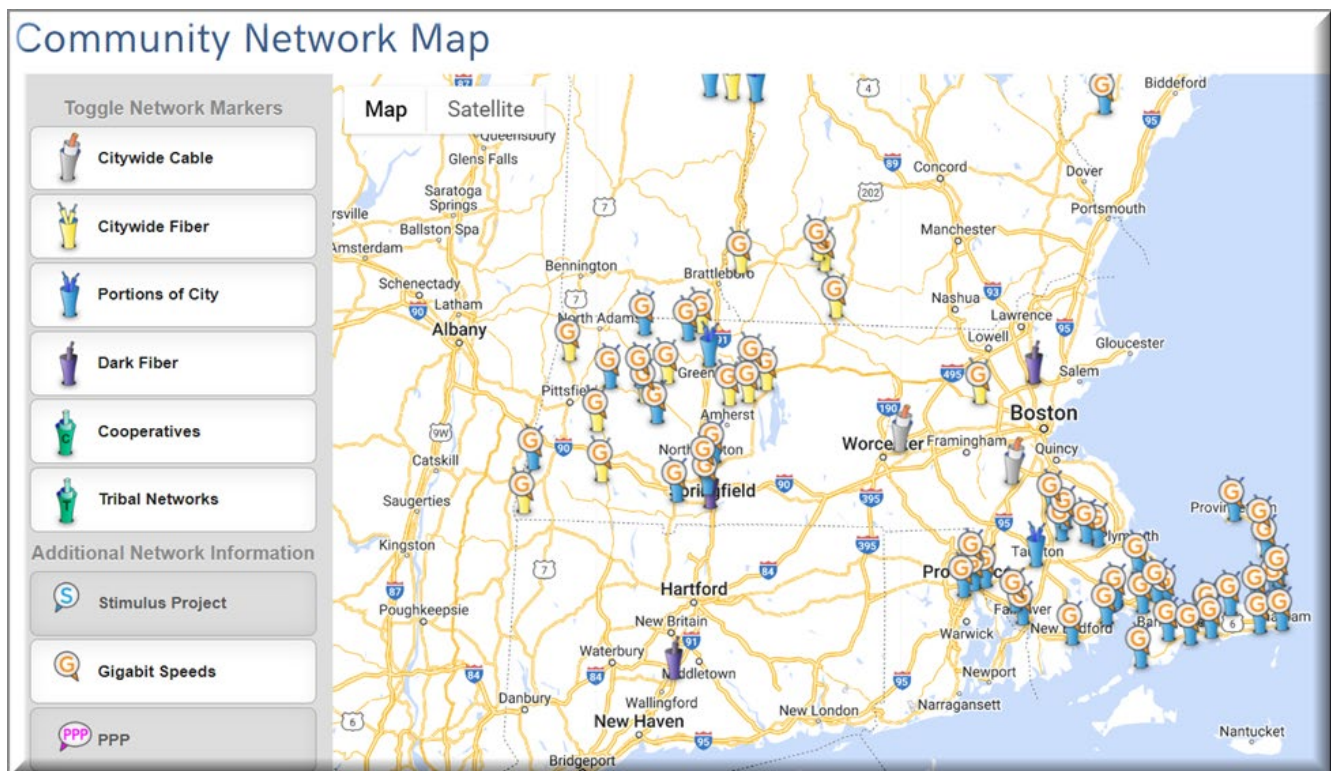
One interesting thing you'll see is the slowdown that occurred as a result of Covid. In the 3-4 years of service buckets, you'll see they are considerably lower than the surrounding years.

What do we do to keep these customers? We try to provide reliable and speedy internet service with excellent customer service. We haven't raised our rates ever, and we treat customer's privacy and data with the utmost respect. There are no data caps or hidden fees. Despite being a small operation, we continually get customers frustrated with alternatives. Recently we have had the opportunity to fix some problems for customers, and they have been extremely grateful for the work product of our staff.

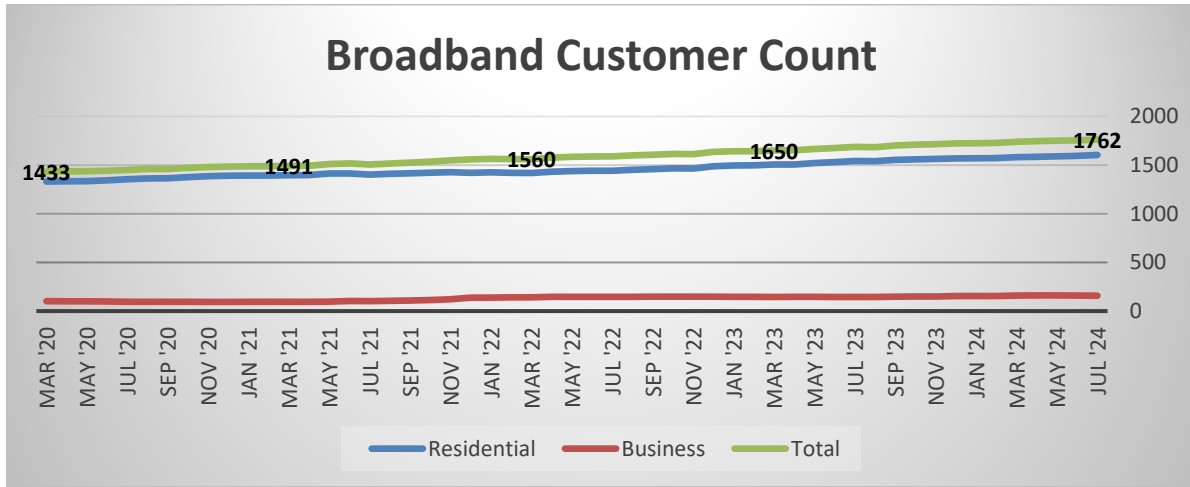
We thank all the customers who have their service with Concord Broadband!

## Tracking Municipal Broadband in Massachusetts

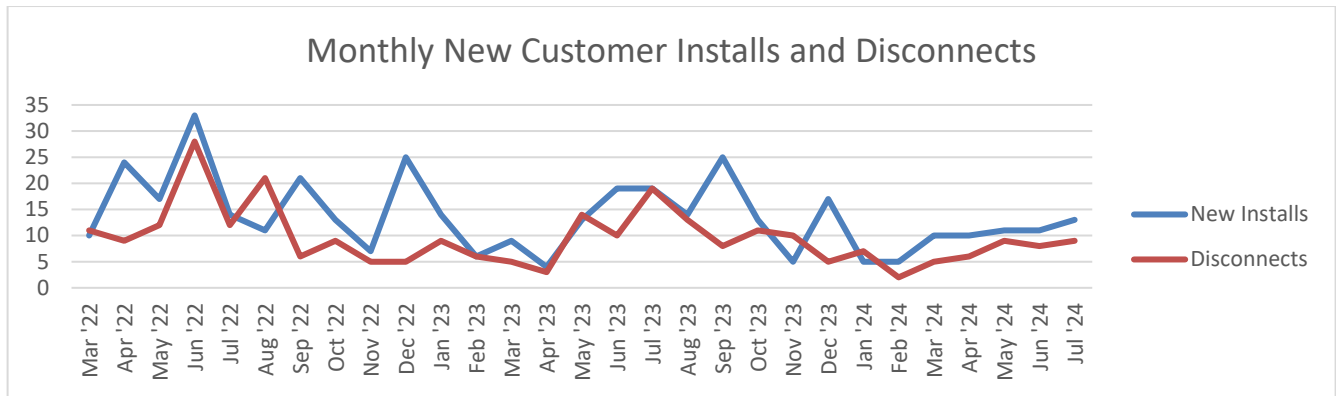
Community Networks, a project of the Institute for Local Self-Reliance, tracks municipal broadband networks. It's great news to see those numbers rising! The link is here: <https://communitynets.org/content/community-network-map>



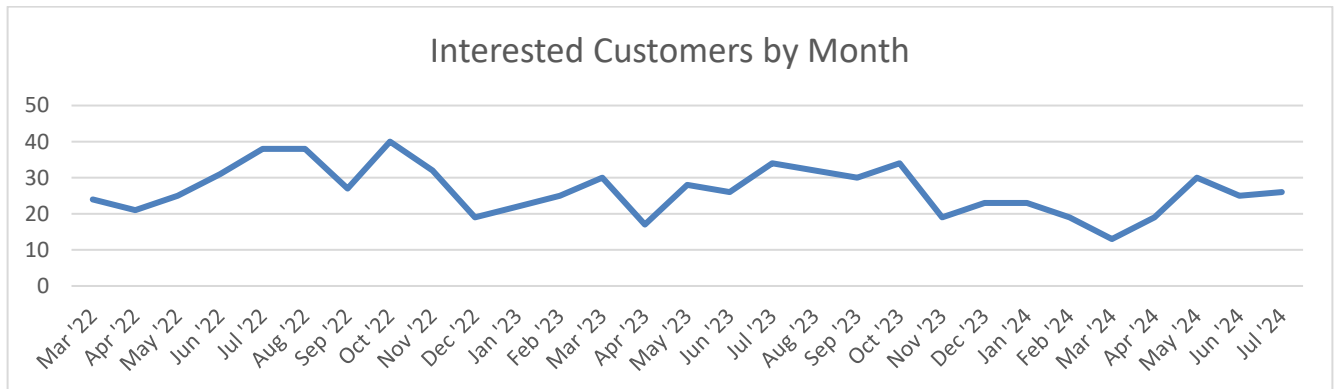
## Monthly Metrics and Business Data



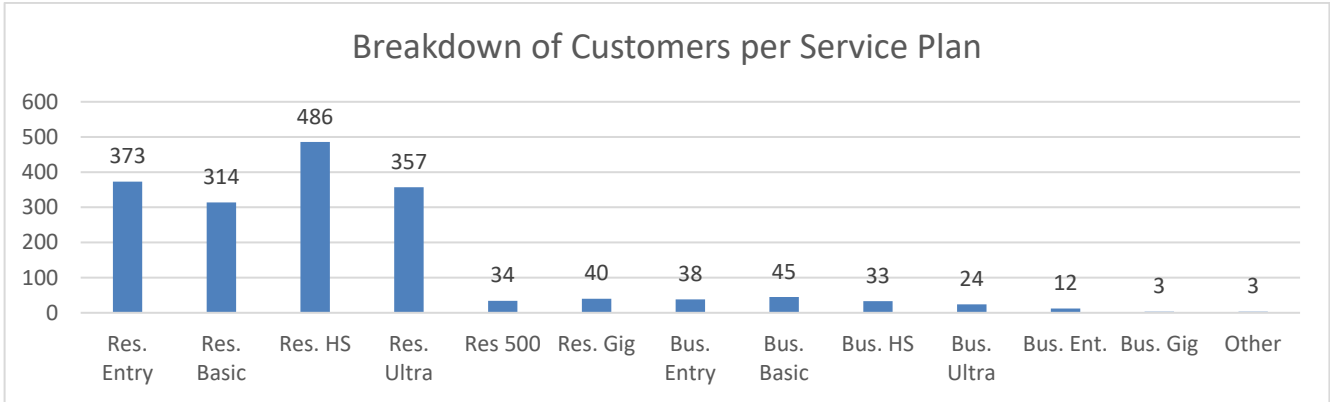
(Customer count: March 2020 – June 2024)



(The number of new installations and disconnects completed each month.)

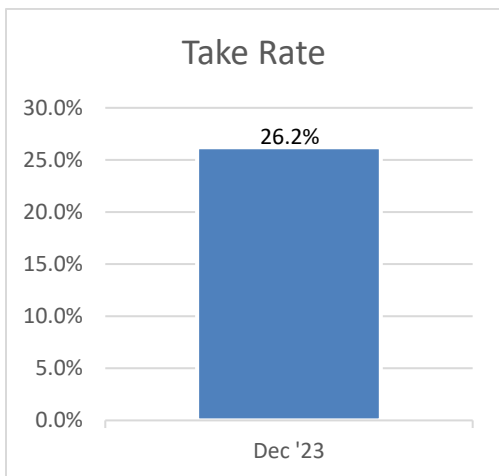
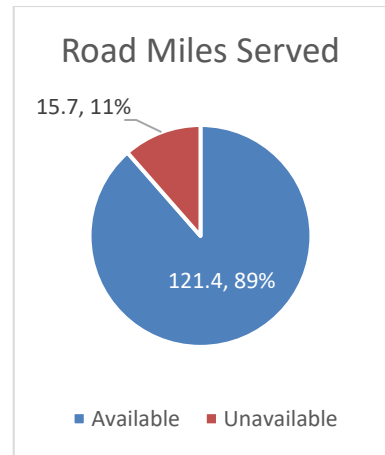
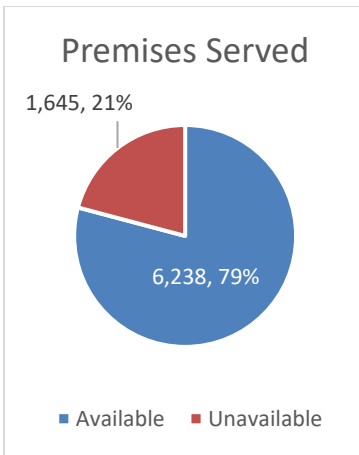
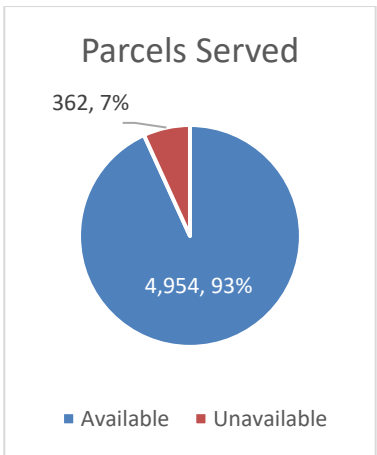


(This is the number of individuals who submit the Broadband interest form, whether they are in the current service area or not.)



*(This is the number of each customer on our different service plans as of 7/31/2024.)*

### Other Metrics



*(As of 12/1/2023)*

## Appendix

### Fiber Broadband Completion Task Force's Draft Report Goals

Goal	Type	Priority	Responsible Party	Additional Info.
<b>Policies (p.39)</b>				
<ul style="list-style-type: none"> <li>Universal Access</li> </ul>	Policy	Highest	Select Board/Town Meeting	
<ul style="list-style-type: none"> <li>Expansion outside current territory</li> </ul>	Policy	Low	Select Board/Town Meeting	Conversations happening
<ul style="list-style-type: none"> <li>Support Economic Vitality, Sustainability, Equity &amp; Inclusion</li> </ul>	Policy	High	Select Board/Light Board/TM Economic Development	Rate subsidy planned
<ul style="list-style-type: none"> <li>Affordable Housing</li> </ul>	Policy	Medium	Select Board/Housing Groups	Rate subsidy planned; working on Concord Housing Authority properties
<ul style="list-style-type: none"> <li>Public Safety</li> </ul>	Policy	Medium	Select Board/Town Manager	
<ul style="list-style-type: none"> <li>Education</li> </ul>	Policy	Medium	Select Board/School Dept.	
<ul style="list-style-type: none"> <li>Government Access (PEG)</li> </ul>	Policy	Medium	Select Board/PAAC	
<b>Recommended metrics for tracking (p.41)</b>				
<ul style="list-style-type: none"> <li>Parcels served</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Premises served</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Road miles served</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Subscribers</li> </ul>	Metric	High	Town Staff/Light Board	Complete; will report monthly
<ul style="list-style-type: none"> <li>Take rate</li> </ul>	Metric	Medium	Town Staff/Light Board	Complete; will report quarterly
<ul style="list-style-type: none"> <li>Churn</li> </ul>	Metric	High	Town Staff/Light Board	Complete; included in monthly report
<ul style="list-style-type: none"> <li>Installations</li> </ul>	Metric	Highest	Town Staff/Light Board	Complete; will report monthly
<b>Governance (p.39)</b>				
<ul style="list-style-type: none"> <li>Track progress against completion</li> </ul>	Metric	Highest	Light Board/Town Staff	Working on this
<ul style="list-style-type: none"> <li>Rate of return policy</li> </ul>	Policy	High	Light Board/Town Staff	Working on this
<ul style="list-style-type: none"> <li>Financial goals with regular reporting</li> </ul>	Policy	High	Light Board/FinCom	Working on this
<ul style="list-style-type: none"> <li>Retained earnings and reserve policy</li> </ul>	Policy	High	Light Board/FinCom	Working on this

Goal	Type	Priority	Responsible Party	Additional Info.
<b>Strategic Planning Goals (p.43)</b>				
• Marketing and growth	Metric	High	Light Board/Town Staff	Working on this
• Business return	Policy	High	Light Board/Town Staff	Working on this
<b>Budgeting Process for Fiber Expansion (p.41)</b>				
• Expand to fill existing opportunities	Planning	High	Light Board/Town Staff	
• External funding sources	Research	Medium	Light Board/Town Staff	Working on this
• ARPA Relief Funds Allocation, incl. Lost Revenue	Finance	Highest	Select Board/Town Manager	Complete
• Review/Confirm Internal Loan Findings	Finance	Highest	Financial Audit Comm/Staff	Complete
• Review and Rescind PILOF to MMN	Finance	High	Select Board/Town Manager	Complete
<b>Capital Planning Process (p.42)</b>				
• Review/Revise Debt financing schedule	Policy	Highest	Light Board/Town Staff	In progress; due to positive financial situation, anticipating being able to repay faster.
• Quantifying cost of expansion	Planning	Medium	Town Staff	Working on this
• How to fund expansion	Planning	Medium	Light Board/Town Staff	Working on this
• Revise/refine methods for computing ROI	Planning	Medium	Light Board/Town Staff	Working on this
<b>Construction and Logistics (p.42)</b>				
• Vibratory plow – direct buried fiber cables	Operations	Medium	Town Staff	Working on this
• Revise/Refine Communication conduit construction standards and guidance	Policy	Medium	Town Staff	Working on this
• Integrate Fiber construction with the Roads Program – focus on Streets without fiber that already have underground electric	Planning	High	Town Staff	Working on this



# CONCORD MUNICIPAL LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

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## 2024 Customer Satisfaction Study



Report of Findings

18 July 2024  
Confidential & Proprietary

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Key Study Findings

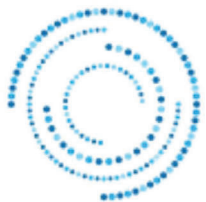
SECTION FOUR

Considerations

SECTION FIVE


Aggregate Data (Provided Separately)







# Harnessing the Power of Data

...to help clients achieve organizational goals.

 **Data** supporting strategic decisions to improve products and services. Since 1979, our experience with study and instrument design, data collection, analysis, and formal presentation assists our clients in identifying the “why” and “what’s next.”

 **Talent** with a knowledge base in a wide range of industries and methodologies ensures a 360° view of the challenges faced and the expertise to address them.

 **Solutions** that are customized to provide a personalized approach to understanding organizational, employee, and customer needs, allowing for more informed decisions.

## Methodologies:



Digital Surveys



Focus Groups



In-Depth Interviews

## Studies:



Awareness and Perception Studies



Customer and Employee Satisfaction Studies



Journey Mapping



Creative and New Concept Testing

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# Project Overview

## Research Objectives

- GreatBlue Research was commissioned by Concord Municipal Lighting Plant (hereinafter “CMLP”) to conduct comprehensive research among its residential customers to gain a deeper understanding into their perceptions of the utility and satisfaction with the services provided.
- The primary goals of this research study were to assess the effectiveness of CMLP’s ability to serve its customers, identify areas for improvement, and isolate areas that may increase engagement.
- The outcome of this research will enable CMLP to a) more clearly understand, and ultimately set, customer expectations, b) act on near term opportunities for improvement, and c) create a strategic roadmap to increase customer satisfaction.



## Areas of Investigation in 2024

The CMLP Customer Satisfaction Study leveraged a digital research methodology to address the following areas of investigation:

- Rating CMLP’s organizational characteristics
- Satisfaction with customer service personnel
- Awareness of CMLP’s ownership model
- Assessment of the value of CMLP’s communication platforms
- Experience with and importance of self-service platforms
- Satisfaction with major storm response and communications
- Awareness and satisfaction with CMLP’s symmetrical broadband service
- Demographic profiles of respondents

# Research Methodology | Snapshot

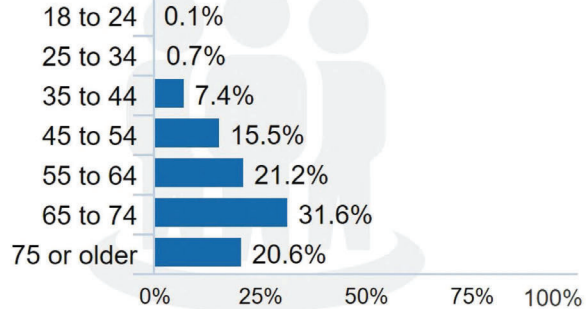
Methodology <b>Digital</b>	No. of Completes <b>1,039</b>	No. of Questions <b>50*</b>	Incentive <b>None</b>	Sample <b>Customer List</b>
Target <b>Residential Customers</b>	Quality Assurance <b>Dual-level**</b>	Margin of Error <b>+/- 2.7%</b>	Confidence Level <b>95%</b>	Research Dates <b>May 2 - June 17, 2024</b>

\* This represents the total possible number of questions; not all respondents will answer all questions based on skip patterns and other instrument bias.

\*\* Data quality personnel, in addition to a computer-aided interviewing platform, ensure the integrity of the data is accurate.

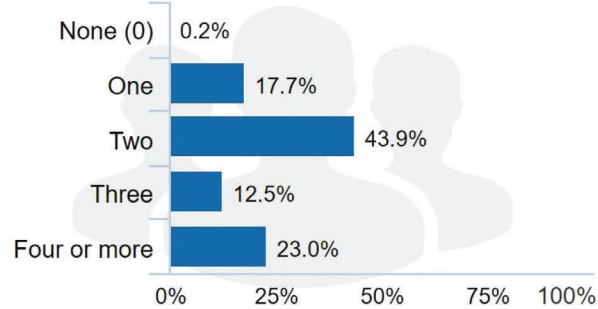
# Respondent Snapshot

## Age



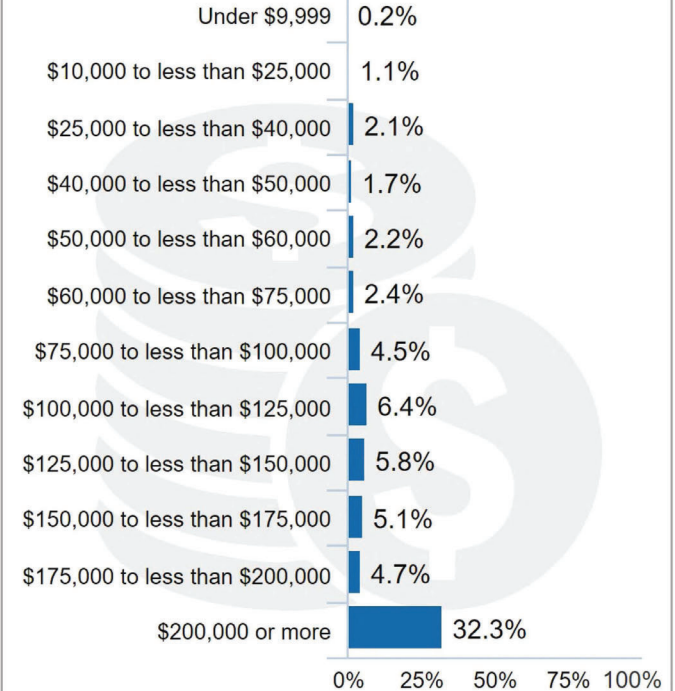
3.0% provided responses of "Prefer not to say / Refused."

## Number of HH Residents



2.7% provided responses of "Prefer not to say / Refused."

## HH Income



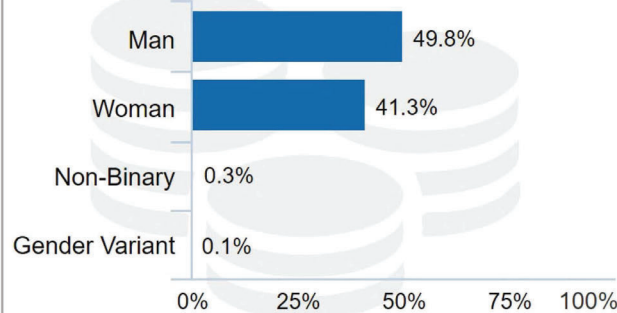
1.3% provided responses of "Don't know / Unsure"  
30.1% provided responses of "Prefer not to say / Refused."

## Rent or Own

**90.5% / 9.2%**  
Own Rent

0.3% provided responses of "Don't know / Unsure."

## Gender Identity



8.6% provided responses of "Prefer not to say / Refused."

# Guide to Footnotes

## General

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***n=362***

*The lowercase "n" is used to indicate the base size, or the amount of respondents who answered a particular question.*

---

**NP+S**

*The NP+S (net positive score) is a score based on a question asking respondents to describe their relationship with their utility. The score is an aggregation of the following responses: "an advocate of my utility," "a loyal customer," and "a satisfied customer."*

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## Scale Questions

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**"Aggregate of ratings 7-10 shown"**

*This phrase indicates positive ratings from questions that use a 10-point scale. The positive ratings are defined as a rating of 7 through 10.*

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# Key Study Findings



## Ratings

- CMLP saw an average positive rating of 90.7% on a series of organizational characteristics, this was driven by positive ratings for “reliable service” (97.4%), “honesty/integrity” (96.0%), and “overall satisfaction with CMLP” (94.7%).
- A strong majority of customers (91.4%) who had a recent interaction with CMLP were satisfied with their contact experience.
- 75.6% of customers who recently interacted with CMLP indicated CMLP typically resolves issues on the first point of contact.
- In 2024, CMLP received an NP+S of 95.5%.
  - Among those, 21.9% of customers identified as “advocates of CMLP.”
- 87.2% of customers reported their expectations regarding their interactions with CMLP are met all (42.9%) or most of the time (44.3%).



## Renewables/Green Energy

- A majority of customers (88.4%) agree that CMLP effectively balances environmental stewardship with fiscal responsibility.
- Over two-thirds of customers (69.6%) believe the actions they take at home to conserve energy have an impact on CMLP’s ability to achieve the statewide goal of achieving net zero greenhouse gas emissions
- 59.2% of customers expressed a great deal of trust in CMLP’s ability to make decisions related to how the energy portfolio is created and maintained.
- Over two-thirds of customers (68.3%) indicated they would be willing to “reduce or pause electric usage” on short notice when it is coincident peak demand time.



## Communication

- Communication methods that customers indicated provide the most value were “e-mail” (86.6%) and the “CMLP website” (77.6%).
- Over two-thirds of customers indicated the most important pieces of information to receive from CMLP are “outages and restoration updates” and “rate information.”
- Nearly three-quarters of customers (71.8%) indicated they prefer to look for information about CMLP on the “website.”


## Digital Self-Service

- 54.4% of customers currently use CMLP’s digital self-service platforms for “bill payment.”
- Nearly eight out of ten respondents (79.3%) find self-service platforms to be important.
- 80.1% of customers provided positive ratings for CMLP’s digital self-service options “delivering and communicating about available programs and services.”

# Satisfaction | Organizational Characteristics

CMLP maintained a high level of customer satisfaction, with 5 out of 7 organizational characteristics receiving a positive rating of 90% or higher.

Customers provided the highest positive ratings for CMLP's "reliable service," "honesty/integrity," and their "overall satisfaction" with CMLP.

	CMLP	MEAM	
Customer interactions and communication	91.8%	93.2%	65.3%
Helping customers reduce their carbon emissions	86.9%	81.1%	-
Honesty / Integrity	96.0%	94.2%	59.7%
Reliable service	97.4%	96.9%	72.7%
Rates	76.4%	88.0%	60.9%
Community Service	91.6%	82.7%	59.3%
Overall Satisfaction with CMLP	94.7%	94.2%	68.0%
<b>Average</b>	<b>90.7%</b>	<b>90.0%</b>	<b>64.3%</b>

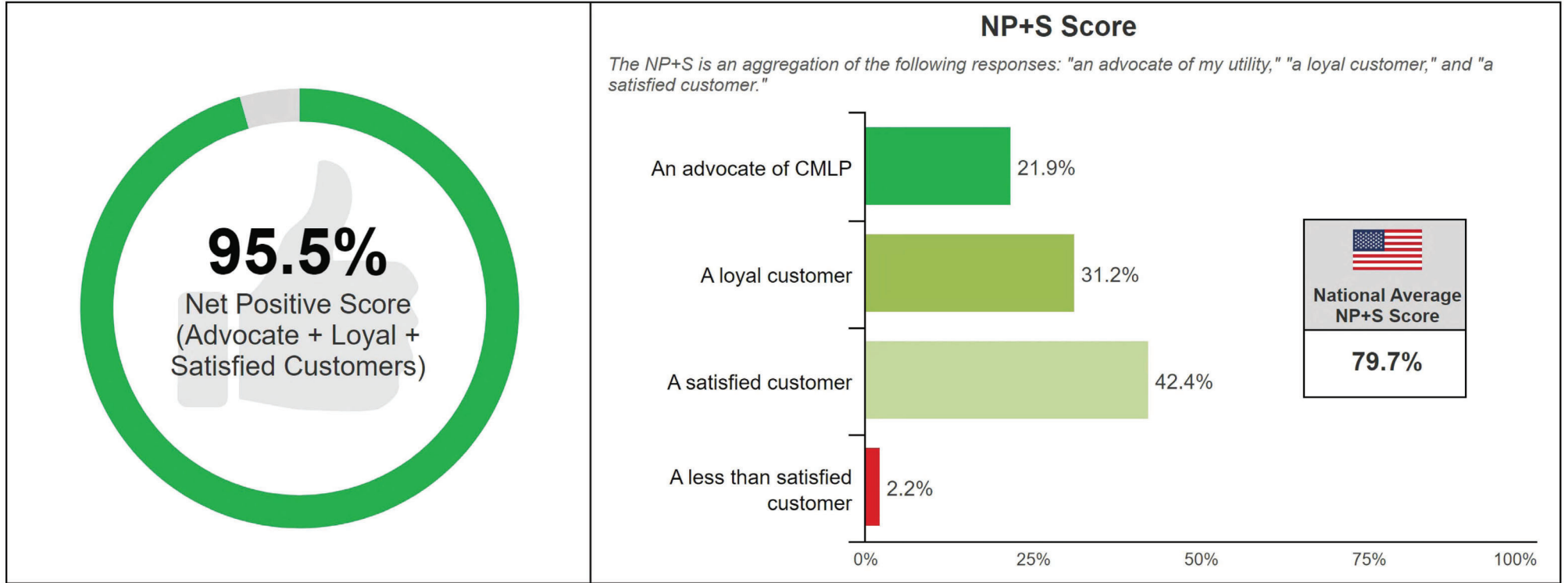
Aggregate of ratings 7-10 shown w/o "don't know" responses

n=1,039

Q1-7: Now, please read the following list of different organizational characteristics. For each characteristic, please rate Concord Municipal Lighting Plant using a scale of one (1) to ten (10) where one is very poor and ten is very good.

# Satisfaction | NP+S Score

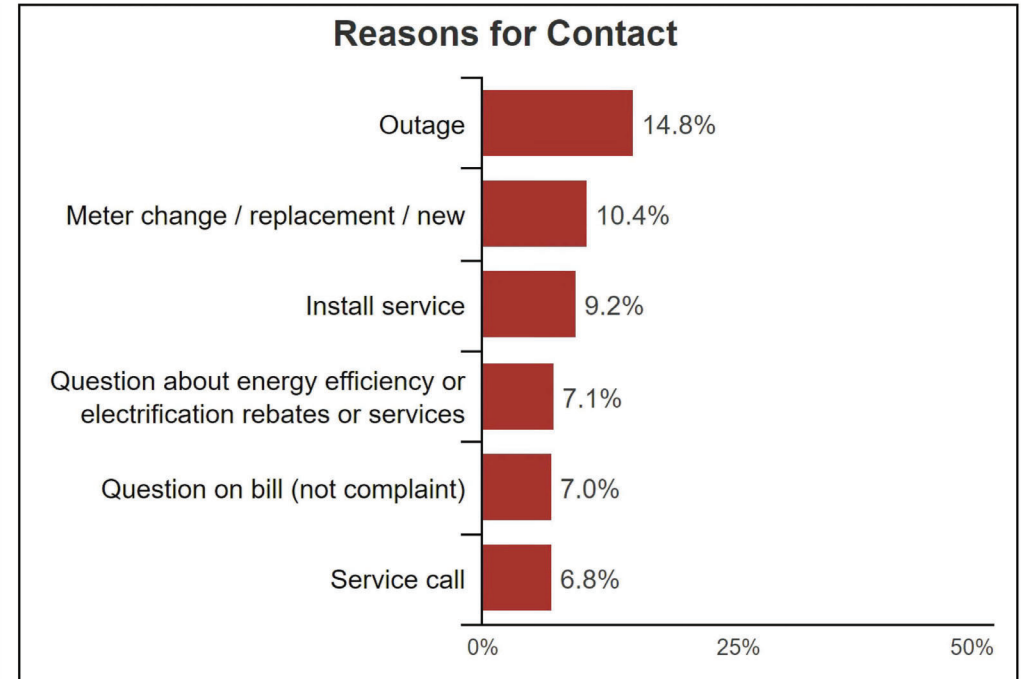
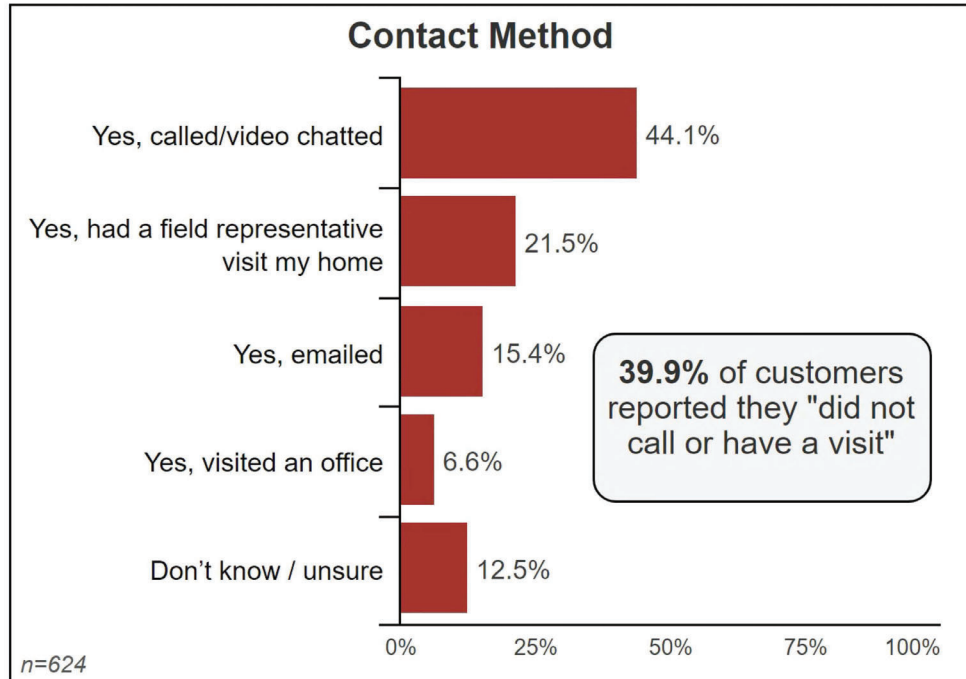
CMLP received a net positive score of 95.6%, which was 15.8 percentage points higher than the national average. Of note, over one-half of customers (53.1%) identified as either an advocate or loyal customer of CMLP.



n=1,039  
Q18: Which of the following would best describe your relationship with CMLP? Would you say... ("Don't know / Unsure" responses not shown)

# Experience | Contact Method & Reason

Of those who have had a recent interaction with CMLP, over two-fifths contacted CMLP over the phone/video chat, followed by 21.5% who had a field representative visit their home. Of those respondents who had contact with a CMLP customer service employee, the primary reasons for contacting CMLP were for an "outage" or to change, replace, or install a new meter.

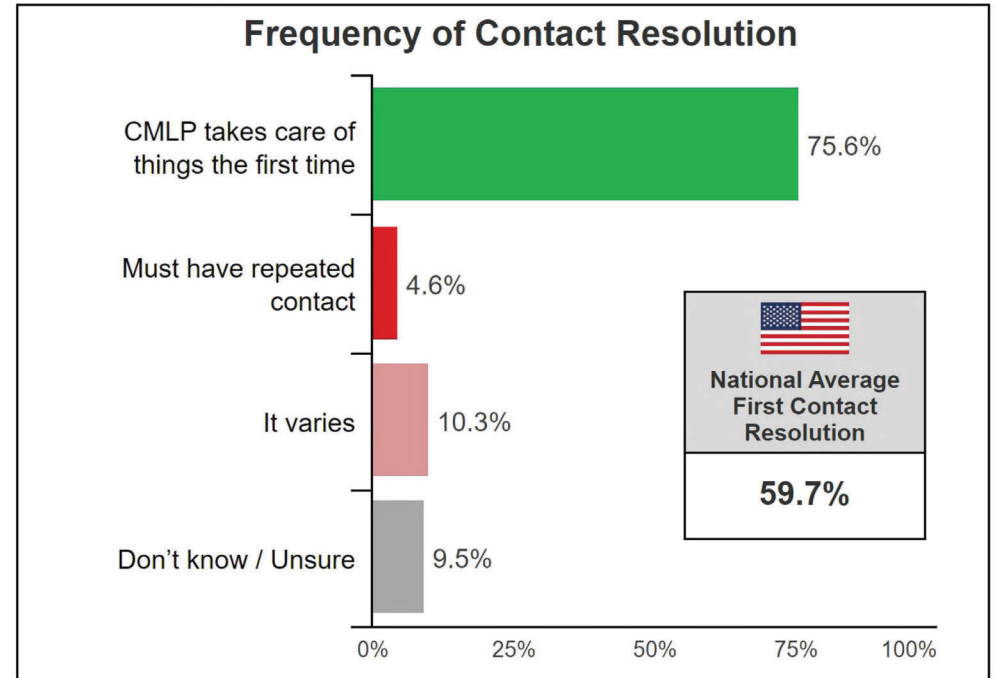
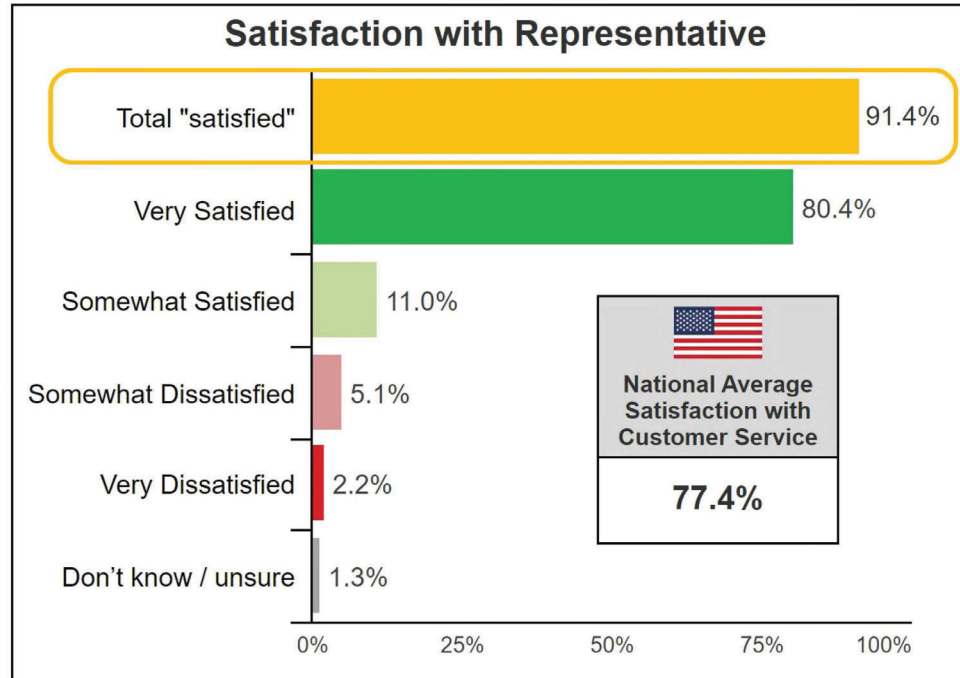


Q9: How would you describe your most recent interaction with CMLP? Would you say that you called/video chatted CMLP, emailed, visited a CMLP office, or had a field representative visit your home? (n=1,039)

Q12: Please indicate the purpose of the call or visit. (n=546)

# Satisfaction | Contact Resolution

Of those respondents who had contact with a CMLP customer service employee recently, over 90% reported being either very or somewhat satisfied with the way the employee handled the call or visit. Further, three-quarters of respondents reported that CMLP takes care of things the first time they contact the utility, which is 15.9 percentage points higher than the national average.



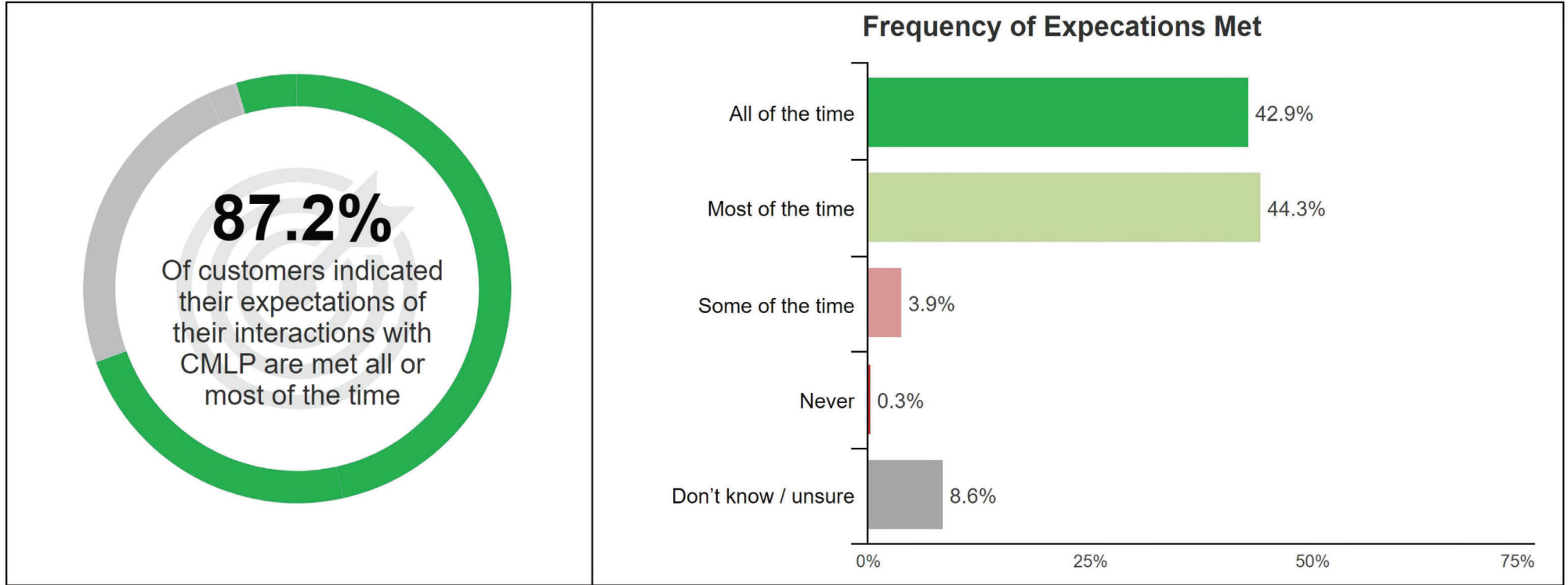
n=546

Q10: Overall, how satisfied were you with the way the CMLP customer service employee handled the call or visit? Would you say you were...

Q13: Generally, when you contact CMLP, are things taken care of to your satisfaction the first time, or must you have repeated contact with them?

# Satisfaction | Communication Expectations Met

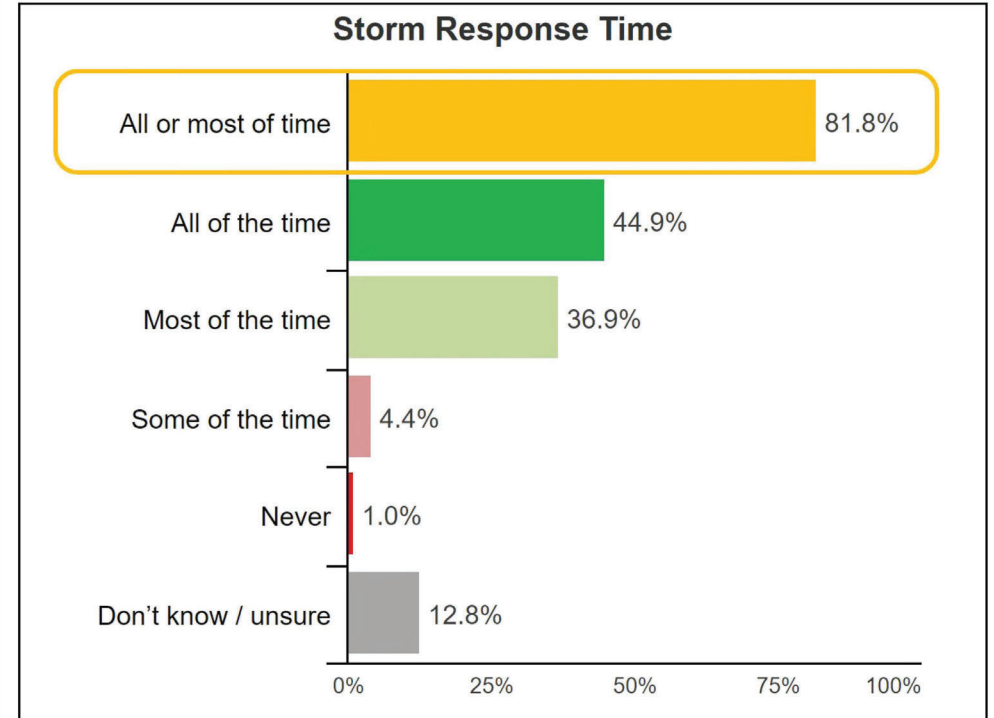
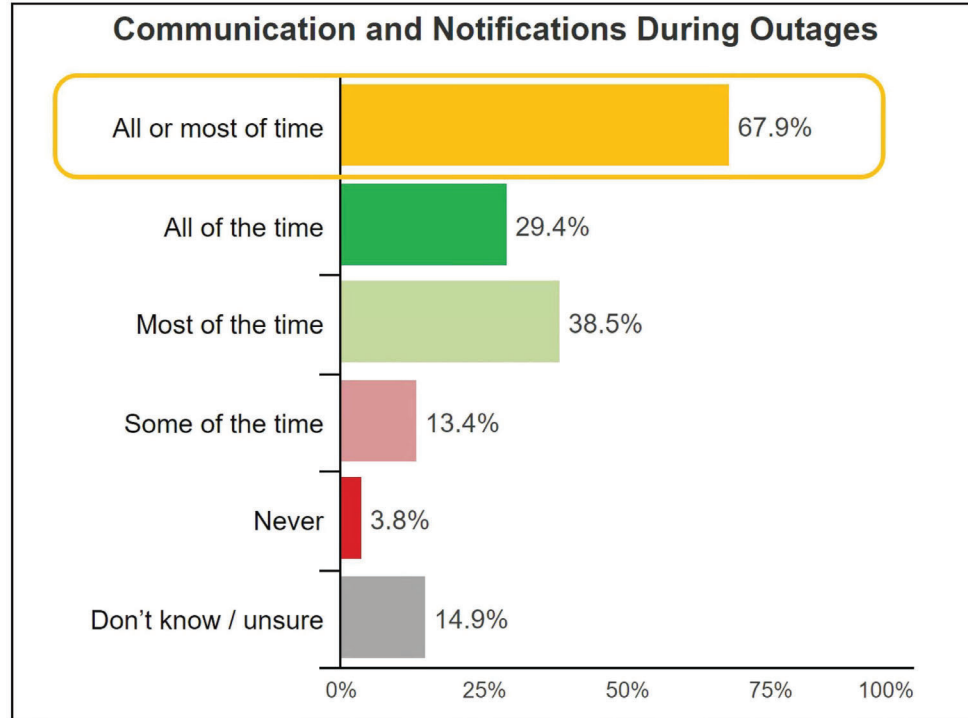
A majority of customers indicated that CMLP meets their expectations with respect to interactions with the utility all or most of the time, with less than 5% of customers reporting that their expectations were met "some of the time" or "never."



n=1,039  
Q36: When thinking of your interactions with CMLP (not pertaining to rates or reliability), how often would you say CMLP meets your expectations?

# Satisfaction | Outage and Major Storms

Two-thirds of customers reported that CMLP meets their expectations all or most of the time regarding communication provided during outages. Further, eight out of ten customers reported their expectations are met "all" or "most of the time" when it comes to CMLP's storm response time.



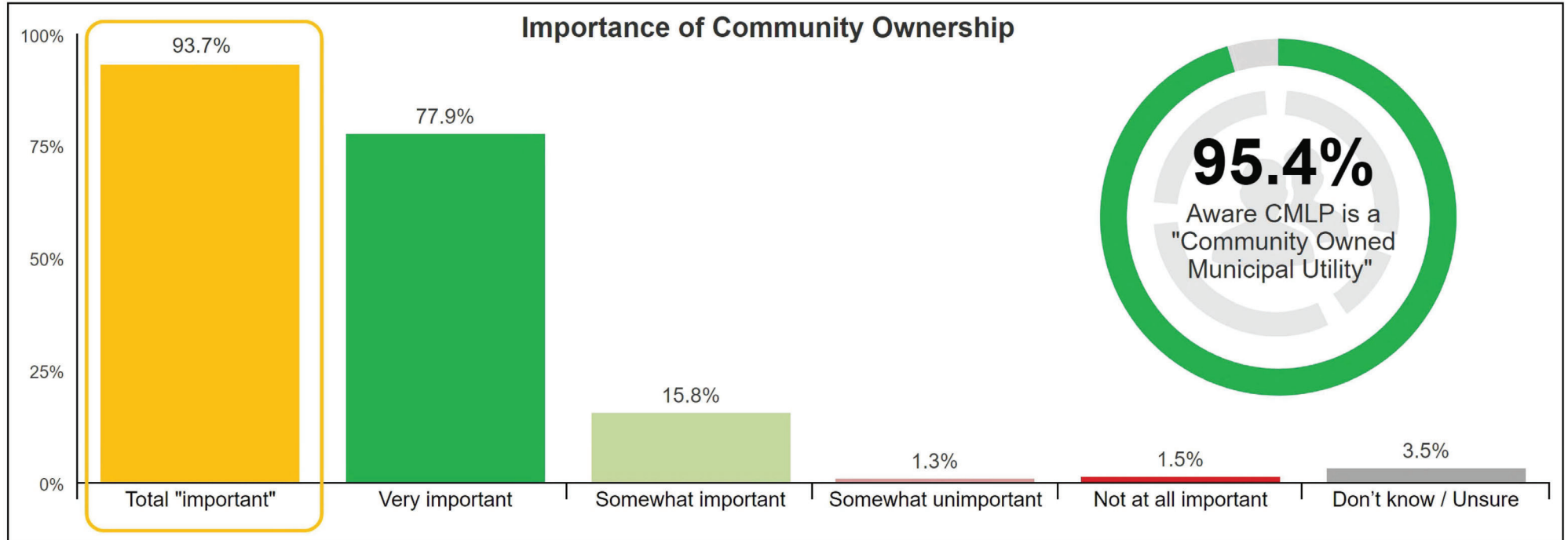
n=1,039

Q37: How often does CMLP meet your expectations regarding its communication and notifications provided during an outage?

Q38: How well does CMLP's storm response time meet your expectations?

# Awareness | Community Ownership

A majority of CMLP customers reported being aware that CMLP is a "city-owned municipal utility." When asked how important it is for CMLP to maintain local control of their municipal utility, over 90% reported it is either "very" or "somewhat important," with over three-quarters of customers stating it is "very important."



*n=1,039*  
Q15: Would you say that your own electric service is provided by a "Community Owned Municipal Utility" or a "Privately Owned Investor Company?"  
Q16: CMLP is a "Community Owned Municipal Utility." How important to you is it to maintain local control of your municipal utility?

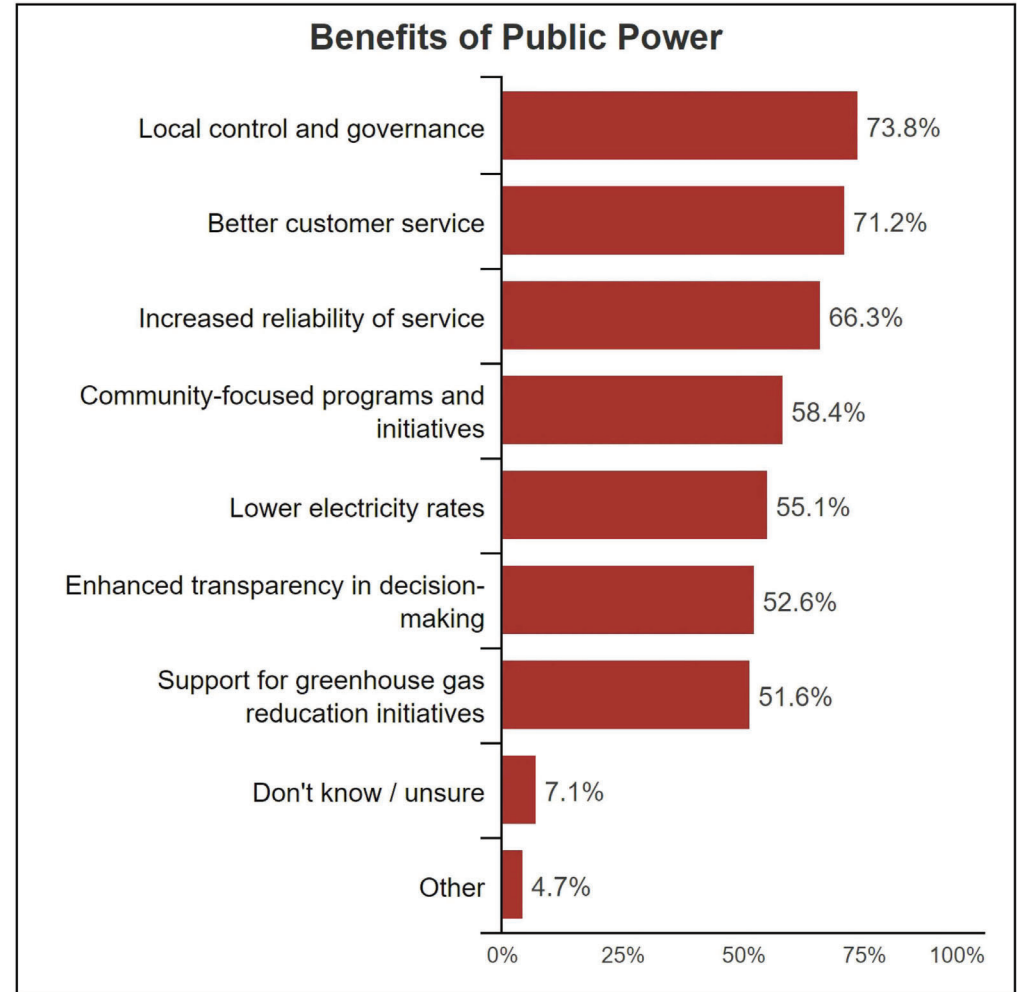
# Experience | Perceived Benefits of Public Power

More than two-thirds of customers reported "local control and governance," "better customer service," and "increased reliability of service" are the primary benefits they associate with a public power utility.

It is worth noting that nearly three-fifths of customers believe that "community-focused programs and initiatives" are also a benefit of a public power utility.

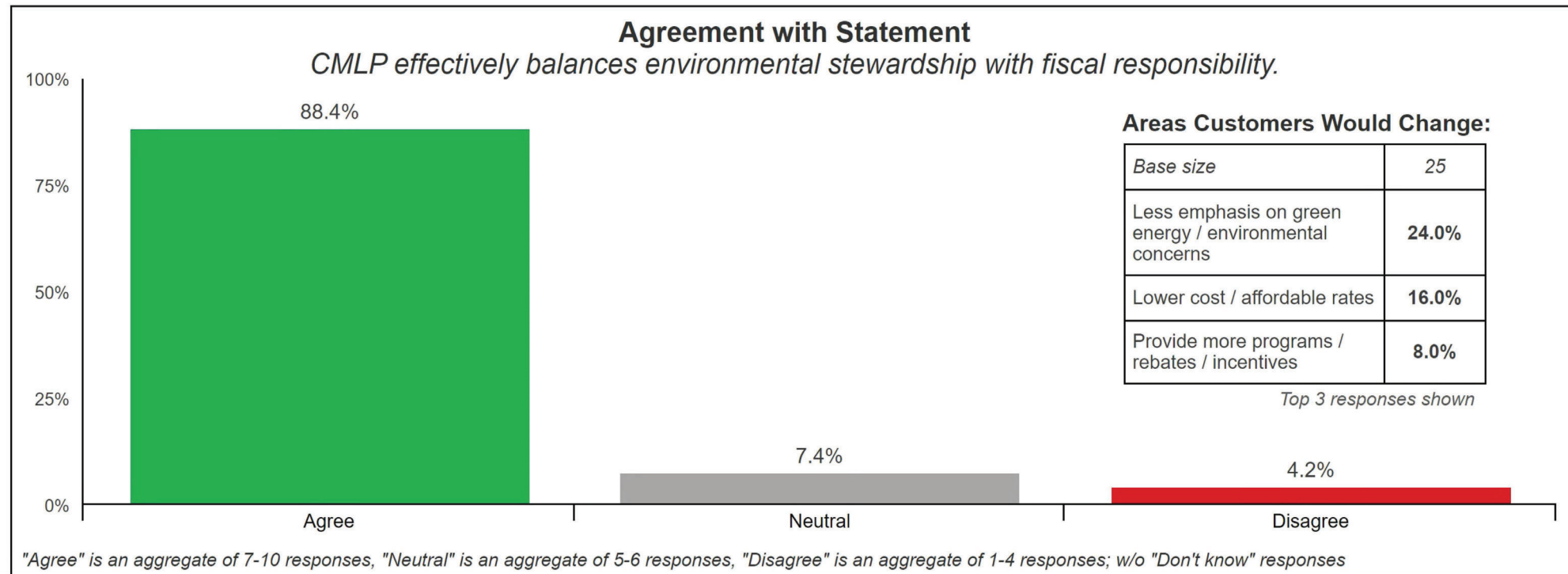
n=1,039

Q17: Please indicate the perceived benefits you associate with a public power utility. (Select all that apply)



# Awareness | Environmental & Fiscal Responsibility

A vast majority of customers agree that "CMLP effectively balances environmental stewardship with fiscal responsibility," while only 11.6% were either neutral or disagreed with this statement.



n=767








Q19: Now please read a statement common to municipally owned utilities. Please use a scale of one (1) to ten (10) where one means you strongly disagree and ten means you strongly agree; CMLP effectively balances environmental stewardship with fiscal responsibility.

Q20: (If ratings of 01, 02 or 03 are recorded for question 19 ask:) Please indicate what you would change:

# Communication | Valuable Channels

When rating the value of communication methods provided by CMLP, over three-quarters of customers indicated "email" and the "CMLP website" are valuable communication channels currently provided by the utility.

Additionally, over three-fifths of customers rated the utility's "bill inserts + Newsletters (digital)" and "text messages" as a valuable communication method. Of note, 21.5% of customers were unsure of the value of CMLP's social media platforms, and 15.7% were unsure of the value of the utility's text messages, suggesting lower usage of both platforms.

	Valuable	Very valuable	Somewhat valuable	Not very valuable	Not at all valuable
 <b>E-mail</b>	86.6%	50.9%	35.7%	3.8%	2.6%
 <b>CMLP website</b>	77.6%	38.2%	39.4%	7.2%	3.9%
 <b>Bill inserts + Newsletters (digital)</b>	62.9%	24.4%	38.5%	14.1%	11.7%
 <b>Text messages</b>	60.9%	30.2%	30.7%	9.9%	13.5%
 <b>Direct mail</b>	56.8%	22.3%	34.5%	17.1%	16.7%
 <b>Bill inserts + Newsletters (printed)</b>	55.4%	21.4%	34.0%	16.2%	19.0%
 <b>Social media (Facebook/X (formerly Twitter))</b>	20.6%	6.9%	13.7%	16.3%	41.7%

n=1,039

Q28: Now, please rate the value of the following communication methods provided by CMLP; for each of the following please indicate if you believe this method is very valuable, somewhat valuable, not very valuable, or not at all valuable.

"Don't know / Unsure" responses not shown

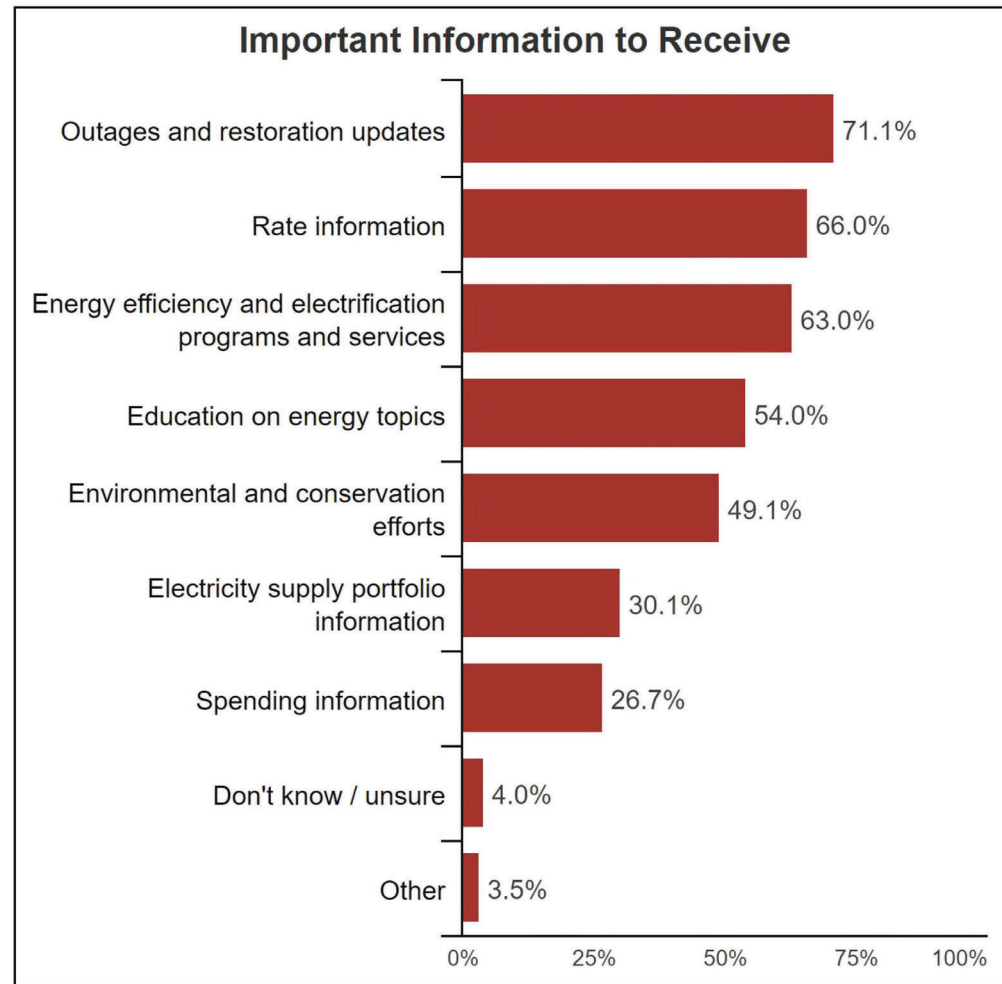
# Communication | Preferred Information

Over seven-out-of-ten customers indicated that receiving updates about outages and restoration is the most important type of information they want to receive regularly from CMLP.

Additionally, over half of customers mentioned that information about rates, energy efficiency, and electrification programs and services, as well as education on energy topics are also important to them.

n=1,039

Q21: Please indicate which of the following are the most important pieces of information to regularly receive from CMLP? (Select all that apply)



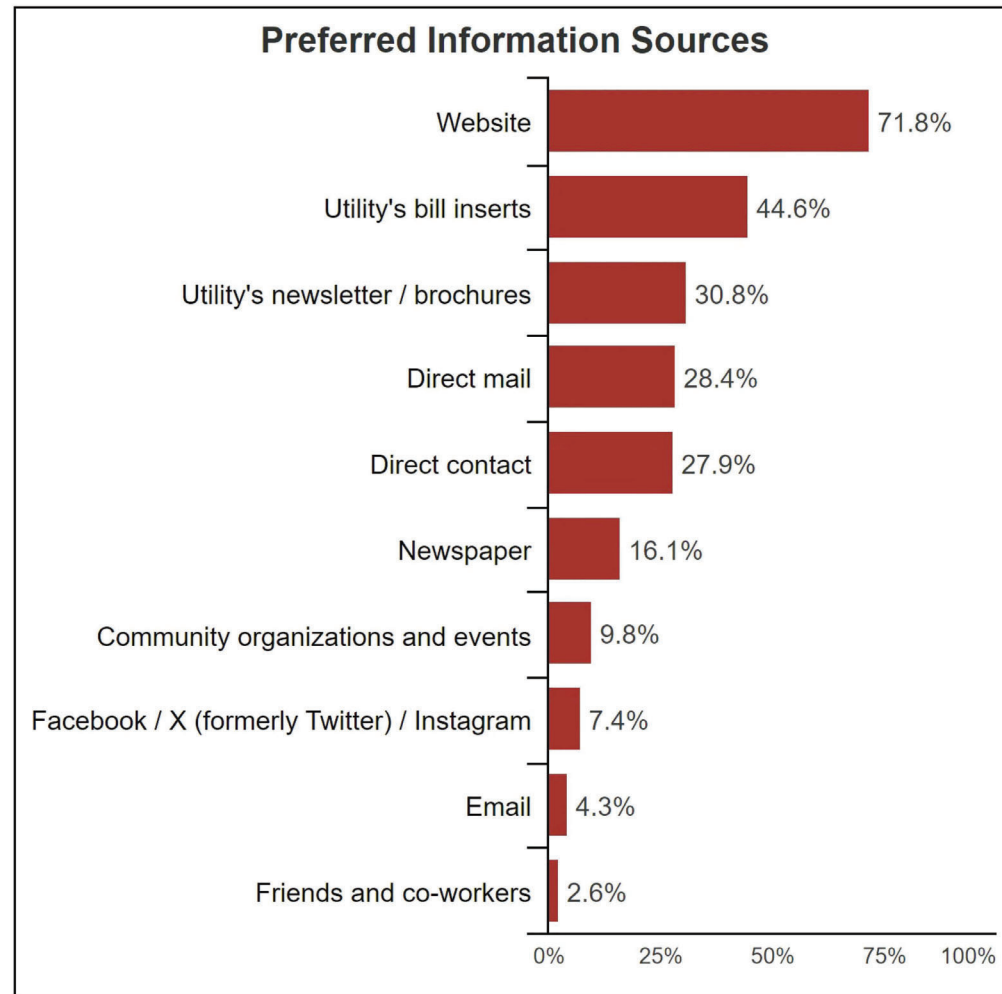
# Communication | Preferred Information Source

Nearly three-quarters of customers indicated that they prefer to look for information about CMLP on the utility's website.

Additionally, nearly one-half of customers prefer to look for information on the "utility's bill inserts" followed by the "utility's newsletter/brochures."

n=1,039

Q29: And, please indicate where you would prefer to look for information about CMLP? (Select all that apply)

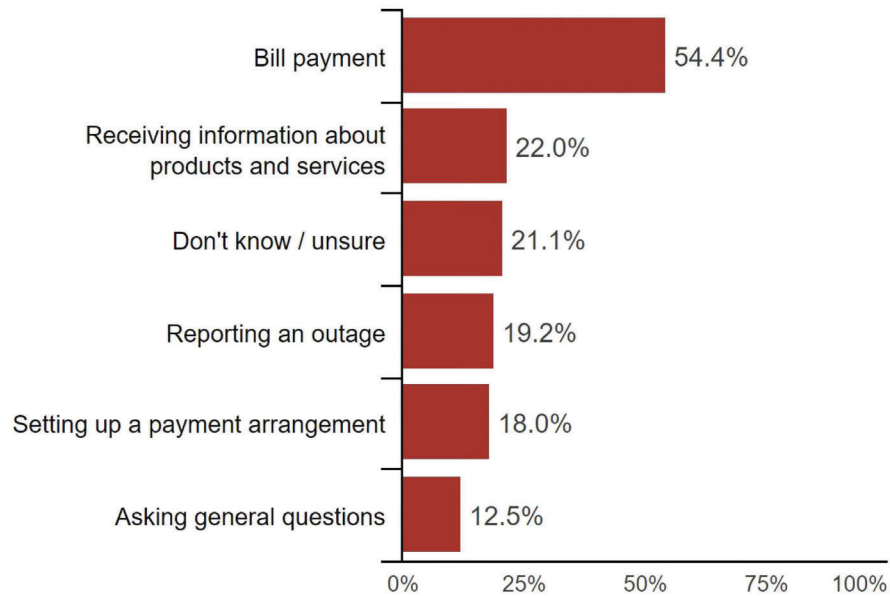


Top 10 responses shown

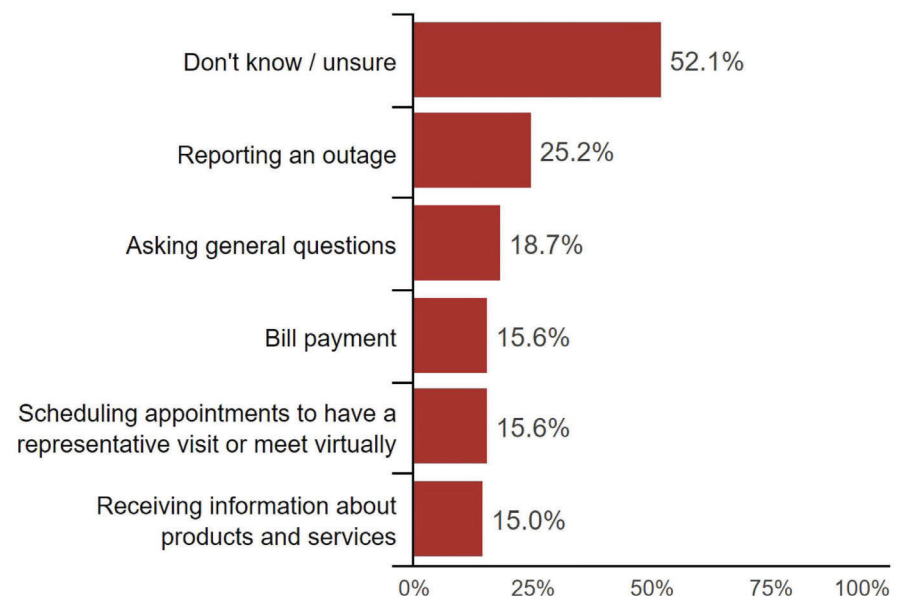
# Self-Service | Experience

Over one-half of customers reported they currently pay their bill through CMLP's digital or other self-service platforms. When asked what tasks they would like to complete through these platforms, over one-half were unsure, however, one-quarter of customers mentioned they would like to have the option to report a power outage through self-service platforms, and nearly one-fifth would like to ask general questions through this platform.

### Tasks Currently Completed Through Self-Service Platforms



### Desired Tasks Through Self-Service Platforms



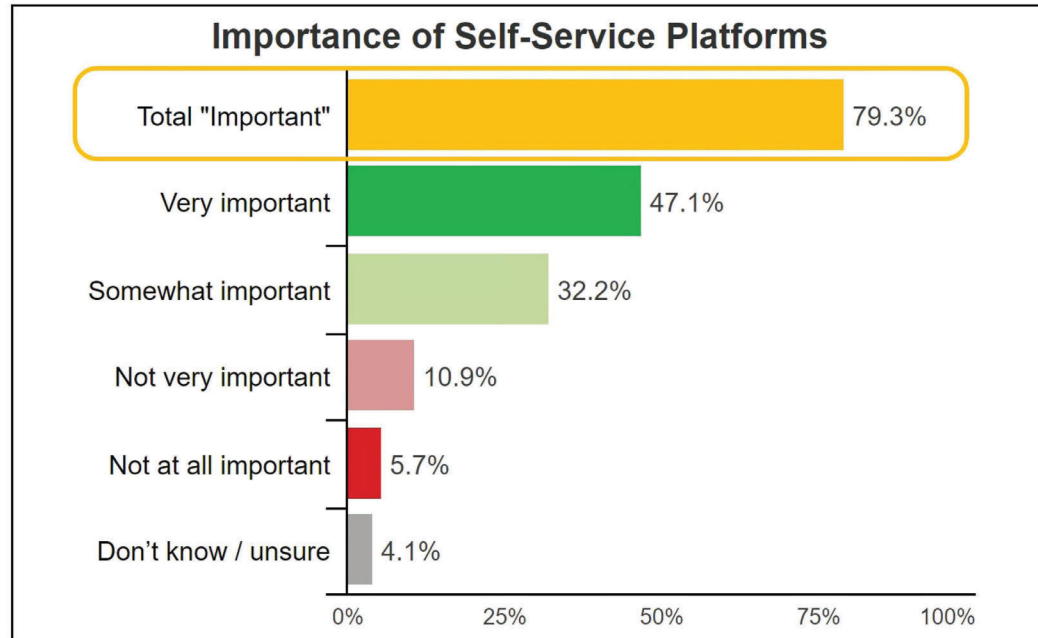
n=1,039

Q34: Which of the following tasks do you currently complete through CMLP's digital or other self-service platforms? (Select all that apply)

Q35: Which of the following tasks would you like to complete through CMLP's digital or other self-service platforms, but are not currently able to? (Select all that apply)

# Self-Service | Importance

Nearly eight out of ten customers reported self-service platforms are either very or somewhat important to them. The majority of customers provided positive ratings for CMLP's performance in "delivering and communicating about available programs and services" through self-service platforms, while a similar frequency gave positive ratings for the "ease of understanding content on the website / app" and the "ease of navigating the website / app."



n=1,039  
 Q30: How important are digital and other self-service platforms (website, e-mail, text, chat feature, online customer portal, payment kiosk or other digital platforms) that give you the ability to have general needs and questions taken care of without the need to speak to a live representative?  
 Q31-33: How well would you say CMLP is currently performing in the following areas pertaining to its self-service digital options? Please rate CMLP's performance on a scale of one to ten where one (1) is "very poor" and ten (10) is "very good."

## Self-Service Characteristics

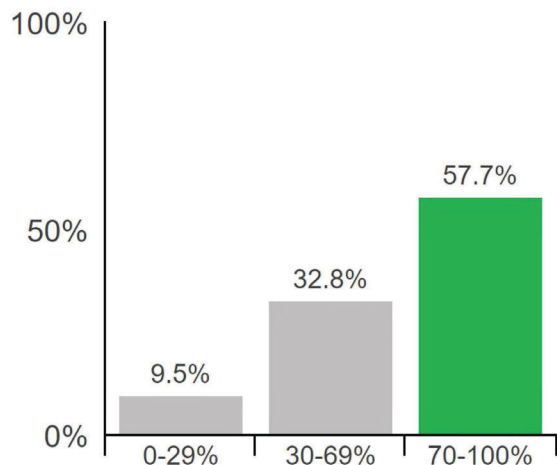
Delivering and communicating about available programs and services	783	80.1%
Ease of understanding content on the website / app	693	78.1%
Ease of navigating the website / app	669	75.9%

Aggregate of ratings 7-10 w/o "don't know" responses

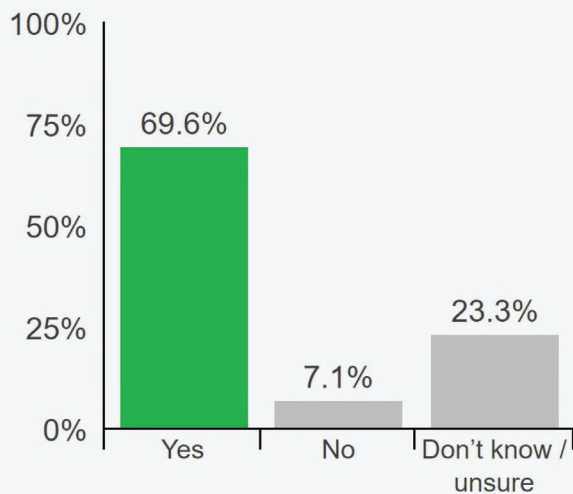
# Renewables | Awareness and Perceptions

Nearly three-fifths of customers believe that 70-100% of CMLP's power supply comes from non-carbon-emitting sources. Over two-thirds of customers agree that the actions they take at home to conserve energy have an impact on CMLP's ability to achieve Net Zero emissions, while nearly three-fifths of customers reported CMLP empowers them to conserve energy at home to help the utility achieve Net Zero greenhouse gas emissions.

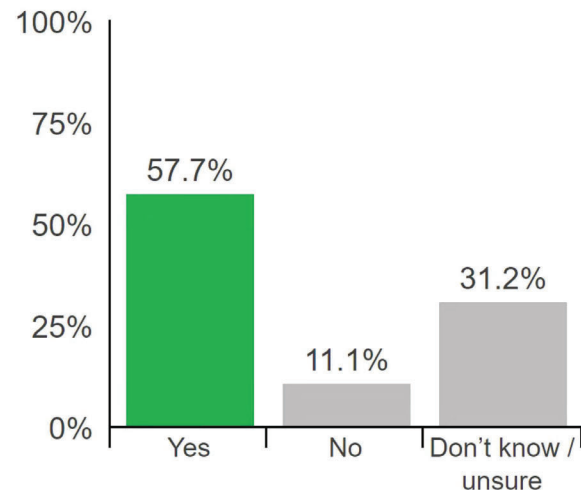
**Q** According to a 2019 study, Massachusetts municipal utilities receive more than 75% of their power from non-carbon-emitting sources. Do you know what % of CMLP's power supply comes from non-carbon-emitting sources?



**Q** Do you feel the actions you take at home to conserve energy and electrify your energy uses have an impact on CMLP's ability to achieve the statewide goal for achieving Net Zero greenhouse gas emissions?



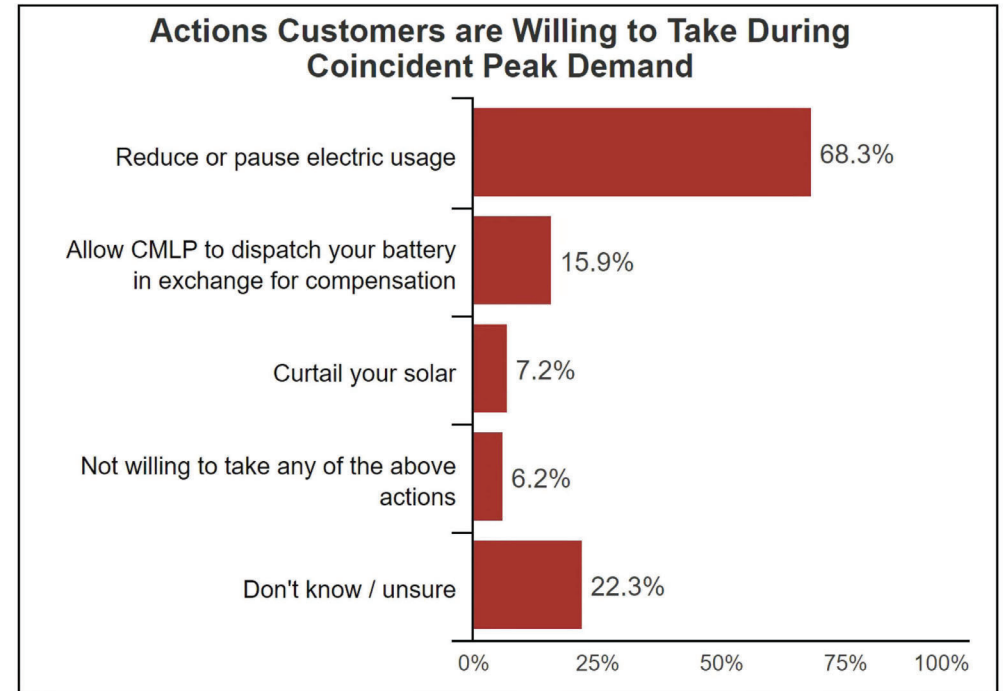
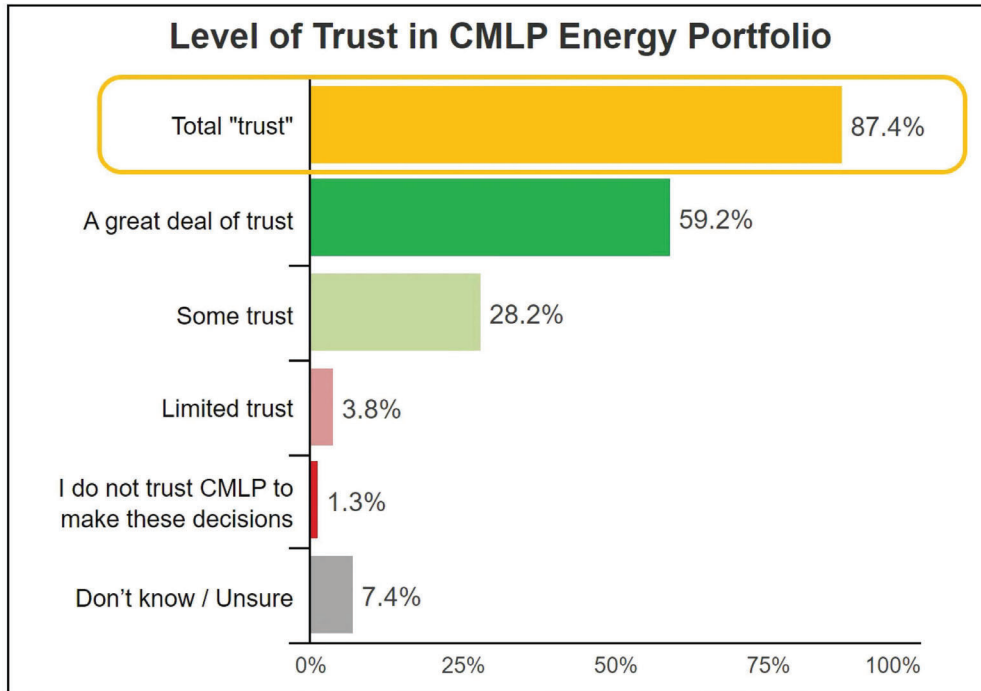
**Q** Does CMLP empower you to conserve energy at home in an effort to assist the utility in achieving its goals for Net Zero greenhouse gas emissions?



n=1,039

# Energy Efficiency | Trust in Energy Portfolio

Nearly three-fifths of customers reported having a "great deal of trust" in CMLP's ability to make decisions related to the way the energy portfolio is created and maintained. When asked about coincident peak demand and their willingness to make adjustments during this time, over two-thirds of customers indicated they would be willing to "reduce or pause electric usage."



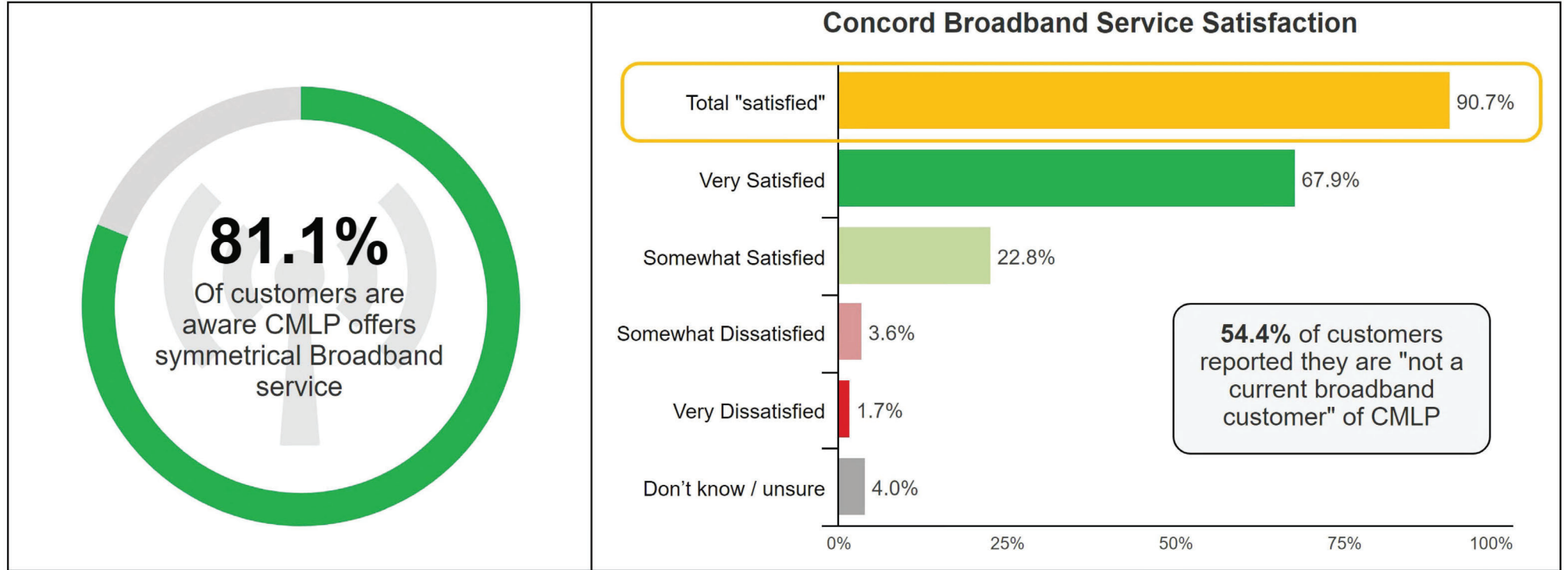
n=1,039

Q42: How much do you trust CMLP to make decisions related to how the energy portfolio is created and maintained (types of energy, infrastructure, and costs)?

Q43: If you received a message from CMLP on short notice that it is a coincident peak demand time, would you be willing to: (Select all that apply)

# Broadband | Awareness & Satisfaction

Over four-fifths of customers reported being aware CMLP offers symmetrical broadband service. Of those who are currently a CMLP broadband customer, nine out of ten reported being either very or somewhat satisfied with this service. Of note, one-half of customers reported they are not current broadband customers.



n=1,039

Q44: Are you aware that CMLP offers symmetrical Broadband service?

Q45: If you are a current Concord Broadband customer, how satisfied are you with the service?

Not including "Not a current broadband customer" responses

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# Considerations



## Outage Communication and Self-Service Reporting

Customers have expressed a clear desire for more timely communication during outages, with nearly three-quarters (71.1%) indicating receiving updates about outages and restoration is the most important type of information they want regularly from CMLP. Enhancing the timeliness and accuracy of these communications will help keep customers informed and reduce frustration during power interruptions. Additionally, a portion of customers (25.2%) mentioned they would like to have the option to report a power outage through self-service platforms, reflecting a growing preference for digital solutions. By integrating and/or improving outage reporting capabilities into self-service platforms, which 79.3% of customers find important, CMLP can enable customers to report issues quickly and efficiently. This will help streamline the process of addressing outages, helping to maintain overall customer satisfaction and reliability.



## Broadband Study Opportunity

Eight-out-of-ten customers reported being aware of CMLP's symmetrical broadband service, however, over half of customers reported not being a current broadband customer. Understanding the reasons behind this lack of participation, whether due to awareness, perceptions of service quality, or other factors, could provide valuable insights for improving and expanding CMLP's broadband offerings. Conducting a focused study on non-users of broadband could help identify potential barriers and opportunities for increasing broadband adoption.

## Net Zero Goal Awareness

Despite the positive reception of CMLP's environmental initiatives, some customers remain uninformed about specific actions and efforts to achieve the Net Zero greenhouse gas emissions goal. To bridge this gap, CMLP can enhance its communication strategy by regularly updating customers on net zero goals through preferred channels such as email and the CMLP website. Providing information about ongoing milestones, and practical steps customers can take to contribute will not only increase awareness, but help to build a sense of community involvement in sustainability efforts.



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WHAT'S NEXT.



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GreatBlue Research

# MEMORANDUM

**TO:** NEPOOL Markets Committee

**FROM:** Samantha Regan and Paul Belval, NEPOOL Counsel

**DATE:** July 2, 2024

**RE:** NEPOOL Generation Information System Hourly Certificates Rule Changes

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At its July 9-10 meeting, the NEPOOL Markets Committee (the “Markets Committee”) will be asked to take action on changes to the NEPOOL Generation Information System (“GIS”) and the GIS Operating Rules (the “Rules”) to accommodate the transfer of hourly certificates that was referred by the Markets Committee to the GIS Operating Rules Working Group (the “Working Group”). The proposed changes to the Rules are included in Appendix A.

The proposed modifications would involve changes to the GIS and the Rules requested by Constellation Energy Generation LLC (“Constellation”). The requested changes would accommodate the transfer of Certificates on an hourly basis through a separate register maintained by APX, Inc. the GIS Administrator (“APX”), and would permit GIS Account Holders to identify certain generators for which the generation data in the GIS would be denoted hourly in that register, on an opt-in basis (the “Hourly Tracking Change”). The Hourly Tracking Change was discussed at several Working Group meetings and then was brought before the Markets Committee at its May 8, 2024 meeting for a vote. The Markets Committee did not vote on the Hourly Tracking Change proposal and agreed to discuss open items further at a future meeting. The Markets Committee asked APX to determine whether the work to implement the Hourly Tracking Change could be staged such that it would straddle 2024 and 2025 APX development hours. The Markets Committee also asked Constellation to provide information on whether a similar change for hourly tracking in the PJM Generation Attribute Tracking System (“PJM GATS”) had any impact on renewable energy credit (“REC”) prices in that region.

The Amended and Restated Generation Information System Agreement between NEPOOL and APX (the “GIS Agreement”) provides that APX will perform up to 500 hours of development work for enhancements to the GIS each year without additional cost to NEPOOL. Proposed GIS changes requiring more than 500 of the annual development hours included under the GIS Agreement would be charged to NEPOOL at the rate of \$180/hour, as provided in Section 4.8 of the GIS Agreement. APX has estimated that 1,245 hours would be required to implement the Hourly Tracking Change with the scope broken down below:

<i>Scope Breakdown</i>	<i>Hours</i>
Hourly Clean Energy tracking for wholesale ISO-NE generators	935 hours
Hourly Clean Energy tracking for Import Projects	310 hours

<b>Total</b>	<b>1,245 hours</b>
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Currently, there are 328 annual development hours remaining for 2024.<sup>1</sup>

At the May 8<sup>th</sup> meeting, Markets Committee members asked whether APX could stage the Hourly Tracking Change work over 2024 and 2025 so that NEPOOL could apply the 500 development hours for 2025 to that work, thereby reducing the out-of-pocket costs to NEPOOL of that work. APX has since responded that the work may be staged between 2024 and 2025. If that were the case, NEPOOL would have to pay for 417 development hours (1,245 hours, minus the 328 remaining 2024 development hours and minus the 500 2025 development hours). The total cost to NEPOOL would be \$75,060 (417 hours multiplied by \$180/ hour).

Also at the May 8<sup>th</sup> meeting, Markets Committee members expressed a concern that demand for Certificates that are registered in the hourly tracking register would decrease the total number of Certificates available for state clean energy law compliance, driving up the cost of those Certificates. Constellation noted that PJM GATS has already implemented an hourly tracking approach and offered to look into whether there has been an increase in REC costs in that region as a result. Constellation determined that, while Renewable Energy Credits and Emissions Free Energy Credits – collectively Energy Attribute Certificate (“EAC”) -- prices have certainly increased in PJM in recent years, it is unlikely that the GATS March 2023 hourly retirement implementation had a material effect. Of the more than 320 million carbon-free MWh generated in PJM in 2023, only 35 million EACs were retired for voluntary purposes. Of those 35 million, Constellation estimates that a very small share – perhaps less than 1% - were used for voluntary hourly purposes. Constellation expects the number of users retiring hourly EACs in PJM to grow over time as generators, suppliers, and energy users continue to recognize the system-level benefits of hourly-matched carbon-free electricity. However, Constellation states that this won’t necessarily result in more EACs being retired for voluntary purposes in total, but rather a shift from monthly to hourly retirements within the existing and growing voluntary footprint as a whole.

Under Rule 1.3 of the Rules, changes to the GIS that require 50 hours or more of labor or have an estimated cost to NEPOOL of more than \$30,000 and that in either case are not required to address a change in law or a change in the ISO Tariff must be approved by the NEPOOL Participants Committee. In the past, the Markets Committee has provided a recommendation on Rule changes that require Participants Committee action. Based on Rule 1.3, if the Markets Committee votes to recommend the Hourly Tracking Change, the Hourly Tracking Change must then be approved by the NEPOOL Participants Committee.

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<sup>1</sup> At the May 8<sup>th</sup> meeting, the Markets Committee approved a change to the GIS related to the password reset reminder in the application program interface, which will require 10 development hours to implement. The Markets Committee also recommended that the Participants Committee approve a GIS change that would provide for the bulk upload of Clean Peak Resources data, which would require 424 development hours to implement, and that change was approved by the Participants Committee on June 25<sup>th</sup>. APX had agreed that NEPOOL could use the 262 development hours that were not used in 2023 for those changes, meaning only 172 of the 500 development hours for 2024 are needed for those changes.

The following resolution may be used to recommend the Hourly Tracking Change:

RESOLVED, that the Markets Committee recommends that the NEPOOL Participants Committee adopt the changes to the NEPOOL Generation Information System and the NEPOOL Generation Information System Operating Rules proposed and discussed at this meeting related to transferring Certificates on an hourly basis, with such non-material changes thereto as the Vice Chair of the Markets Committee may approve.

cc: NEPOOL GIS Operating Rules Working Group

APPENDIX A

HOURLY TRACKING CHANGE RULE CHANGES

[Attached]

## **Rule 2.2 Account Holder Registration**

\* \* \* \*

(l) A NEPOOL Generator that is also a Zero Emissions Generator, or an Importing Account Holder importing Imported Unit Energy from a Zero Emissions Generator, may opt to have the Certificates for its generation in any calendar month denoted as being tracked in the Hourly Generation Ledger, as described in Rule 2.9. Such Certificates are referred to as “Hourly Claim Certificates,” and the NEPOOL Generator or Importing Account Holder receiving Hourly Claim Certificates shall be referred to as an “Hourly Claim Generator”. Hourly Claim Certificates shall be denoted in full MWh, as with other Certificates. Hourly Claim Certificates will be issued, in accordance with Rule 2.9 and transferred in accordance with Rule 3.1(b).

\* \* \* \*

## **Rule 2.9 Hourly Claim Certificates**

(a) Each Account Holder opting to claim the hourly output of its eligible NEPOOL Generator or Imported Unit Energy and have Hourly Claim Certificates issued for that eligible NEPOOL Generator or Imported Unit Energy for a specific calendar month shall notify the GIS Administrator at least five (5) days prior to the start of that month, which notice shall apply to all subsequent calendar months unless and until that Account Holder notifies the GIS Administrator that it no longer wishes to receive Hourly Claim Certificates for that GIS Generator or Imported Unit Energy, which notice shall also be given at least five (5) days prior to the start of the month for which Hourly Claim Certificates are not to be issued.

(b) Monthly generation data for an Hourly Claim Generator must meet all requirements of these Rules. The hourly breakdown of that monthly generation data must be provided directly to the GIS Administrator via a secure internet portal by either (1) the regional transmission organization or independent system operator (as recognized by the Federal Energy Regulatory Commission) that covers the area in which such generating unit is located (including ISO-NE for NEPOOL Generators), or (2) an electric utility metering the generation of such generating unit, or (3) a nationally recognized renewable energy credit tracking system, or (4) a Third Party Meter Reader meeting the requirements of Rule 2.5(j). The GIS Administrator will keep a separate ledger of the generation data for each such Hourly Claim Generator for each month in which it is an Hourly Claim Generator (the “Hourly Generation Ledger”). Generation data shall be recorded in the Hourly Generation Ledger in thousandths of a MWh. The GIS Administrator shall not create Hourly Claim Certificates or record generation in

the Hourly Generation Ledger for any hour for which is has not received hourly generation data as provided above.

(c) Each Hourly Claim Certificate shall include a notation that it is an Hourly Claim Certificate and the generation represented by that Certificate is registered in the Hourly Generation Ledger maintained by the GIS Administrator, as provided in Part 12 of Appendix 2.1. Except for such notation on each Hourly Claim Certificate, Hourly Claim Certificates shall be created and issued in the same manner as all other Certificates.

### **Rule 3.1 Transfers Among Account Holders**

(a) Except as otherwise provided in these Rules, Account Holders may transfer Certificates to other Account Holders pursuant to a Forward Certificate Transfer (defined below) or at any time during a Trading Period (defined below). Account Holders transferring such Certificates shall reflect such transfer in the GIS by indicating in a designated screen in the GIS that such Certificate has been transferred and selecting the transferee. The designated transfer screen shall include a field for price information and a free-form text field for the transferor to use in identifying the transfer transaction, which fields shall also only be visible to the GIS Administrator and the transferee and which fields may be left blank in any transfer. In turn and in a similar fashion, the Certificate transferee shall confirm the transfer in a designated screen in the GIS. If the transfer includes Hourly Claim Certificates as described in Rule 3.1(b), the date and hour of the generation represented by those Hourly Claim Certificates shall also be included in the designated transfer screens. Subject to any restrictions for Forward Certificate Transfers described in Rule 3.3, the transferring Account Holder may cancel any Certificate transfer before such transfer has been confirmed by the transferee by withdrawing the transfer in a designated screen in the GIS. The transfer of any Certificate shall only be registered in the GIS upon the electronic notification by both the transferor and the transferee. Account Holders may designate one or more agents for purposes of transfers and acceptances of transfers of Certificates by creating logins for them.

(b) In any transfer of Hourly Claim Certificates, the transferring Account Holder shall include in the transfer request the date(s) and hour(s) of the generation associated with such Hourly Claim Certificates. Prior to the transfer screen becoming available to the transferee for confirmation, the GIS Administrator will confirm in the Hourly Generation Ledger that such generation does not exceed the uncommitted generation (i.e., generation that actually occurred and is not associated with Hourly Claim Certificates subject to another pending or accepted transfer request) of the applicable Hourly Claim Generator for the specified date(s) and hour(s). Upon confirmation of the transfer by the transferee, the GIS Administrator shall record the transfer in the Hourly Generation Ledger. In the event that the sum of the generation included in a single transfer request for Hourly Claim Certificates does not result in whole MWhs being transferred, the number of Hourly Claim Certificates transferred in response

to such transfer request will in each case be rounded down to the next lower number of whole MWhs.

\* \* \* \*

### **Rule 3.3 Forward Certificate Transfers**

\* \* \* \*

(b) In the registration of a Forward Certificate Transfer, the GIS Generator or Importing Account Holder registering that transfer shall indicate (in addition to the requirements in Rule 3.1) (1) the GIS Generator or Importing Account Holder that will create such Forward Certificates, (2) the months or Trading Period(s) to which the Forward Certificate Transfer relates (which may be a single month or Trading Period or a specific number of Trading Periods, as designated in the registration), (3) the maximum number of Forward Certificates to be transferred, or the percentage of total Certificates actually created that will be transferred, during each such month or Trading Period, (4) whether, as a result of Massachusetts vintage requirements, a certain number of Certificates must be created in any calendar year before the Forward Certificates to be transferred will be created, and, if so, the number of such Certificates in each indicated calendar year, and (5) whether the transferor has the ability to rescind the Forward Certificate Transfer prior to the creation of the Forward Certificates. For a Forward Certificate Transfer of Hourly Claim Certificates, the GIS Generator or Importing Account Holder registering the transfer may only indicate a percentage of total Hourly Claim Certificates to be transferred in that Forward Certificate Transfer, and that percentage will be applied to the generation in every hour of the month or Trading Period to which the Forward Certificate Transfer relates. For Reserved Certificate and export transactions, the transferor shall transfer the number or percentage of Forward Certificates to the specially designated accounts for Reserved Certificate transfers and exports in the same fashion as those transfers are effected presently under Rules 3.5 and 3.6, respectively. Neither NEPOOL nor the GIS Administrator, nor the ISO shall have any liability if some or all of the Forward Certificates to be transferred are not created during any applicable Trading Period because of an outage of the GIS Generator or importing generating unit, failure to dispatch the GIS Generator or importing generating unit, failure of an Importing Account Holder to satisfy the requirements of Rule 2.7, or any other reason beyond the reasonable control of NEPOOL, the GIS Administrator or the ISO. Once the Forward Certificate Transfer is registered in the GIS, such Forward Certificates, when converted into Certificates on their Creation Date, will be deposited directly into the account of the transferee, and the transferor will not at any point have possession of those Forward Certificates. The GIS Administrator will notify each transferor when its Forward Certificate Transfer has been registered in the GIS. Any exercise of a contractual right of rescission of a Forward Certificate Transfer by a transferor shall be effected upon notice to the GIS Administrator from the transferor (without confirmation by the transferee), and in no event will the GIS Administrator be required to determine

whether conditions to that rescission, other than receipt of the rescission notice, have been satisfied before effecting the rescission.

\* \* \* \*

### **Rule 3.5      Reserved Certificates**

- (a) Account Holders may sell Certificates directly to third parties in good faith, arm's length transactions for reasonable value, independent of transactions involving Energy between those purchasers and their Retail LSEs (Certificates sold in such transactions are referred to herein as "Reserved Certificates.") To avoid the possibility of double counting Certificates, each Account Holder that sells a Reserved Certificate shall, at the time of such transfer, transfer such Reserved Certificate in the GIS to a specially designated Reserved Certificate account using the procedure described in Rule 3.1 and, for a Forward Certificate Transfer of Reserved Certificates, the procedure described in Rule 3.3 (but without confirmation by the transferee). Each Account Holder may designate one or more subaccounts within the Reserved Certificate account. Transactions involving Reserved Certificates are limited to Certificates (other than Clean Peak Energy Certificates) representing MWhs (A) generated or to be generated by a Zero Emissions Generator or (B) generated or to be generated using a fuel source that is designated as being eligible for such transactions on Appendix 2.4 hereto (except as otherwise provided in these Rules) ("Renewable Certificates"), it being the intent of this Rule that Fuel Sources identified in Part 1 of Appendix 2.4 that are defined as "renewable" (i) by any Attribute Law or (ii) by any statute, regulation or order or decision of a governmental agency of a New England state with respect to eligibility for monies from a state renewable energy fund would be considered Renewable Certificates. A Reserved Certificate may be returned from the Reserved Certificates account to the Account Holder transferring it at any time during the Trading Period for that Certificate if the underlying sale of such Certificate to a third party has not been effectuated. At the end of such Trading Period, all Reserved Certificates in the Reserved Certificate account shall be retired and shall no longer be available for further transfer, and their attributes shall not be included in any Residual Mix Certificates.

\* \* \* \*

### **Rule 4.1      Retail LSE Obligations, Accounts and Subaccounts**

\* \* \* \*

- (e) Retail LSEs may hold Certificates in their Default Subaccounts without assigning them to any other Retail Subaccount. APS Certificates may be held in a Retail LSE's Retail Subaccount without being matched to that Retail LSE's Certificates Obligation. Clean Peak Energy Certificates shall be held solely in a

Retail LSE's subaccount specifically designated for those Clean Peak Energy Certificates, and no Certificates that are not Clean Peak Energy Certificates will be held in such a subaccount. [Hourly Claim Certificates may not be transferred into or held in a Retail Subaccount.](#)

\* \* \* \*

## **Rule 5.2 Reports for Account Holders**

(a) The GIS Administrator will furnish electronically to each registered Account Holder quarterly and annual reports that aggregate by MWh the various Certificate fields listed on the Certificates owned by such Account Holder for such reporting period. [Information regarding Hourly Claim Certificates may be provided in a separate report.](#) Quarterly reports shall be provided by the 5th day after the close of a Trading Period, and annual reports shall be produced by June 20 of the year following the year to which the report applies. Annual reports shall include amounts for the generation occurring and Certificates Obligations arising during the applicable calendar year and shall include Certificates transactions that occurred during the portions of the Trading Periods that occurred following the end of such calendar year. Account Holders may view only data for their individual accounts and subaccounts.

\* \* \* \*

## **Rule 5.3 Reports for Regulatory Agencies and ISO**

\* \* \* \*

(b) Each report provided to the Regulators and the ISO shall include the following information:

- (i) List of GIS Generators identified by name, date commercial operations were commenced, and date of any repowering and/or capacity addition, categorized by fuel source, [with Hourly Claim Generators during the applicable period specifically designated;](#)

\* \* \* \*

- (vi) Total number of Certificates created during the reporting period (with APS Certificates, NH Class I Thermal Certificates, NH Biodiesel Producer Certificates, Maine Thermal Certificates ~~and~~, Conservation Certificates [and Hourly Claim Certificates](#) accounted for separately);

\* \* \* \*

\* \* \* \*

(xxv) Subject to Rule 5.3(d) below, list of GIS Generators identified by (A) name, (B) location, (C) date commercial operations were commenced, (D) date of any repowering and/or capacity addition, (E) fuel source, (F) eligibility under state renewable portfolio standards, alternative energy portfolio standards, clean energy standards or clean peak standards (as reflected in Part 2 of Appendix 2.4), (G) asset identification number, (H) total generation or conservation, in MWh, for the reporting period, ~~and~~ (I) whether generation or conservation data included in that report was provided to the GIS Administrator by a Third Party Meter Reader and the identity of any Third Party Meter Reader providing such data; and (J) whether each GIS Generator was an Hourly Claim Generator during the applicable reporting period (the information described in items (G), (H) and (I) of this Section 5.3(b)(xxv) is referred to as “Protected Generator Information”);

\* \* \* \*

(xxviii) Total number of SREC-II Ineligible Certificates created during the reporting period; ~~and~~  
(xxix) Total number of Clean Peak Energy Certificates created during the reporting period; ~~and~~  
(xxx) Total number of Hourly Claim Certificates created during the Reporting Period, reported separately for NEPOOL Generators and Importing Account Holders.

\* \* \* \*

#### **Rule 5.4 Publicly Available Reports**

\* \* \* \*

(e) The publicly available reports posted on the GIS Administrator’s website shall include an aggregation and/or average, as appropriate, of the Certificate fields for all Certificates created during the quarterly or annual reporting period. Such reports shall aggregate data separately for NEPOOL Generators, Importing Account Holders, Non-NEPOOL Generators, Included Generators, C&LM Resources, BMG Resources, Class III Cogeneration Resources, DR Resources, MAPS CHP Resources, MAPS Useful Thermal Resources, NH Useful Thermal Resources, NH Biodiesel Producers, Maine Thermal Resources, Clean Peak Resources ~~and~~ Non-NEPOOL Generator Representatives and Hourly Claim Generators, and shall also include data aggregated for all GIS Generators and Importing Account Holders and data aggregated by originating control area (if other than ISO New England) and RPS or APS eligibility for all Imported Unit Energy. Those reports shall include the aggregate and/or average, as appropriate, of the Certificate fields for all Residual Mix Certificates, all Reserved Certificates, all Certificates assigned to state-specific subaccounts and all

Certificates associated with Energy exported from the New England for the quarterly or annual reporting period as well. Those reports shall also include a listing of all Third Party Meter Readers for the time period covered by each such report and the number of Certificates issued using the RSIP Estimation Methodology during the time period covered by each such report. In addition, those reports shall be capable of being sorted by the state of origination and settlement, by eligibility for RPS and APS programs, and by fuel type for all such Certificates for the time period covered by each such report.

\* \* \* \*

(h) In addition to the other reports provided for under this Rule 5.4, at the start of each Trading Period, the GIS Administrator will post in a publicly available portion of the GIS website the following information for the three-month period applicable to such Trading Period:

- (i) GIS Generators names and locations;
- (ii) Total number of Certificates created in such Trading Period;
- (iii) Total Energy imported into the New England Control Area by state or control area, aggregated by RPS or APS eligibility;
- (iv) Total Energy exported from the New England Control Area: ~~and~~
- (iii) Total Certificate Obligations for such Trading Period;
- (iv) Total Hourly Claim Certificates created in such Trading Period, reported separately for NEPOOL Generators and Importing Account Holders; and
- (v) Total Hourly Claim Certificates transferred in such Trading Period, reported separately for NEPOOL Generators and Importing Account Holders.

\* \* \* \*

*Appendix 2.4*

### **GIS Certificate Fields<sup>1</sup>**

\* \* \* \*

**Part 12 –Hourly Claim Certificate with the generation represented by that Certificate registered in the Hourly Generation Ledger maintained by the GIS Administrator (yes/no)**

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<sup>1</sup> Fields identified with an asterisk (\*) will not change.

Date: August 8, 2024

To: Concord Municipal Light Board

From: Jason Bulger, Interim Director

Subject: Paperless Billing

### Background

During FY 2024 Concord Municipal Utilities paid \$64,016 for Printing and Mailing Services. This cost was shared between all of the service providers (Electric, Telecom, Water, and Sewer) based on the number of accounts. Currently 40% of utility accounts are paperless. The monthly cost per utility account is \$0.50, while the cost per envelope mailed is \$1.03.

### Goal

To convert paper accounts to paperless, exceeding 70% paperless accounts across Concord Utilities. This would reduce our reliance on paper goods as well as reduce the carbon cost of this process. The annual savings from this conversion would be around \$32,000. Having customers on automatic billing decreases the likelihood they end up in collections.

### Other Public Power Entities

Other entities do one of the following:

1. No incentives for paperless billing adoption.
2. One-time payment for signing up for paperless billing and/or automatic payments.
3. Recurring payment for signing up for paperless billing and/or automatic payments.
4. Monthly fee for those receiving printed bills. As a note, only two states have laws forbidding charging for the printing of paper bills. While this option seems the fairest, it is likely not the most equitable, since certain customers require paper bills and cannot opt out of them.

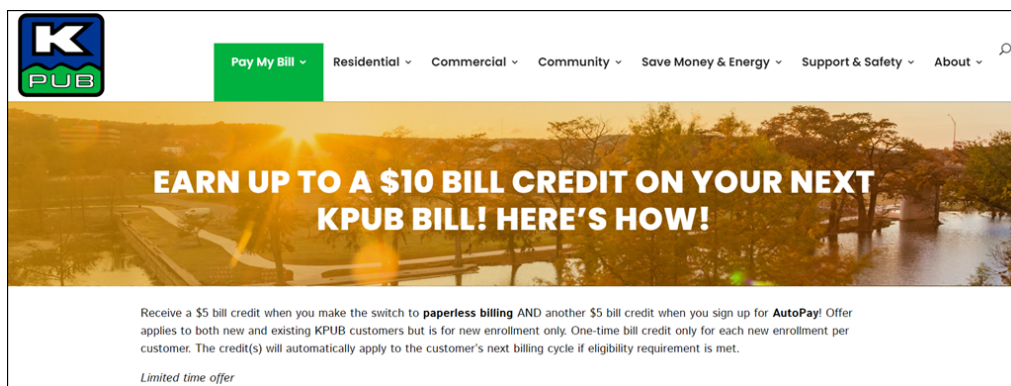


Figure 1: Kerville Public Utilities bill credit - \$5 for paperless billing or \$10 for that and AutoPay

### Information Campaign

Regardless of which path we head down, we will continue to educate customers and advertise the SmartHub program. We will do this at the time of onboarding new customers as well as by sending Periodic Bill inserts to inform customers of the benefits of adopting paperless billing and SmartHub.

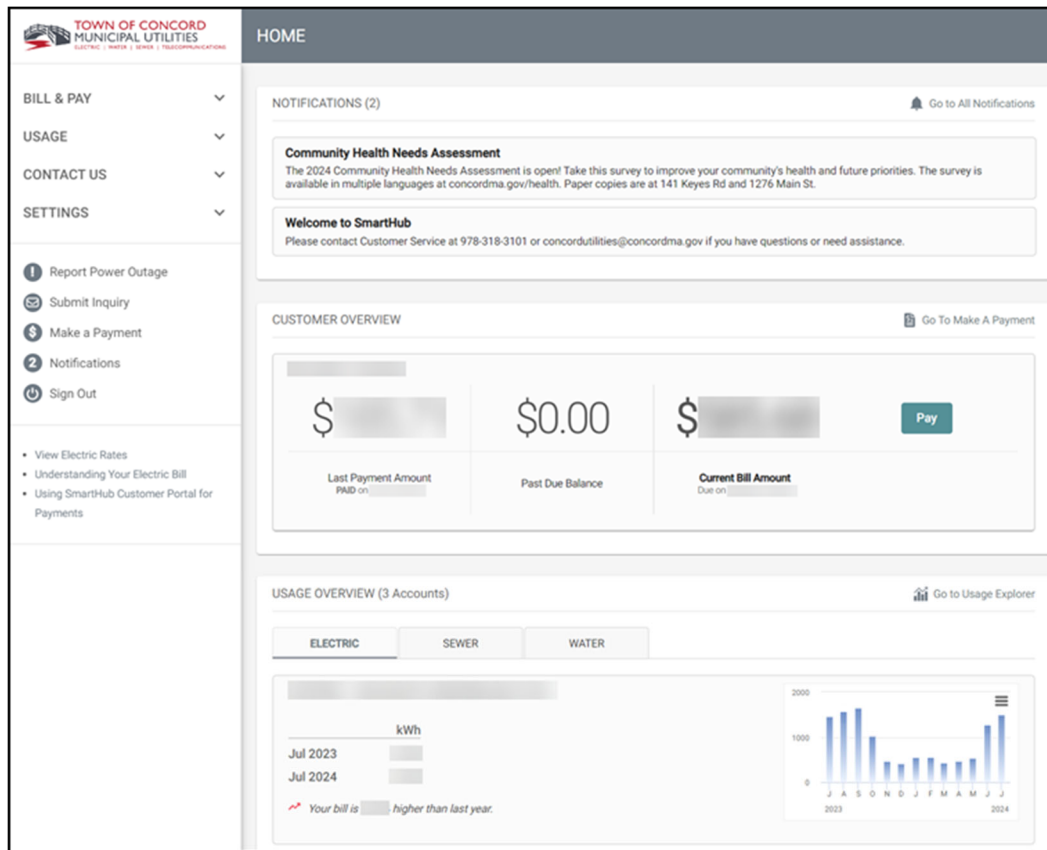
### Possible Courses of Action

1. One-time Credit for customers that switch to SmartHub and set up paperless billing
2. On-Going Monthly Credit for customers that switch to SmartHub and set up paperless billing

### SmartHub Benefits

SmartHub allows you to see detailed usage information on your bills. There is a Usage Comparison and Usage Explorer application to understand your usage, and you can even download your data to be input into an application of your choice.

You can also pay your bill – either one time or on an ongoing basis. Finally, you can report issues or outages at your location. There are iOS and Android apps for SmartHub. Customers can sign up today here: <https://concord.smarthub.coop/ui/#/login>



The screenshot shows the SmartHub customer portal for the Town of Concord Municipal Utilities. The interface includes a navigation menu on the left with options like 'BILL & PAY', 'USAGE', 'CONTACT US', and 'SETTINGS'. The main content area is titled 'HOME' and features several sections: 'NOTIFICATIONS (2)' with a 'Community Health Needs Assessment' and a 'Welcome to SmartHub' message; 'CUSTOMER OVERVIEW' showing 'Last Payment Amount', 'Past Due Balance' (\$0.00), and 'Current Bill Amount' with a 'Pay' button; and 'USAGE OVERVIEW (3 Accounts)' for 'ELECTRIC', 'SEWER', and 'WATER' services, including a bar chart comparing usage between July 2023 and July 2024.



# **AEGIS Assessment: 2024**

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# Background

- AEGIS (Associated Electric & Gas Insurance Services) provides about 40% of the Light Plant's excess liability coverage.
- They offered 2 municipal utilities a free comprehensive assessment, and CMLP volunteered.
- The assessments were conducted between April 30 and May 2, 2024

# Areas of Study

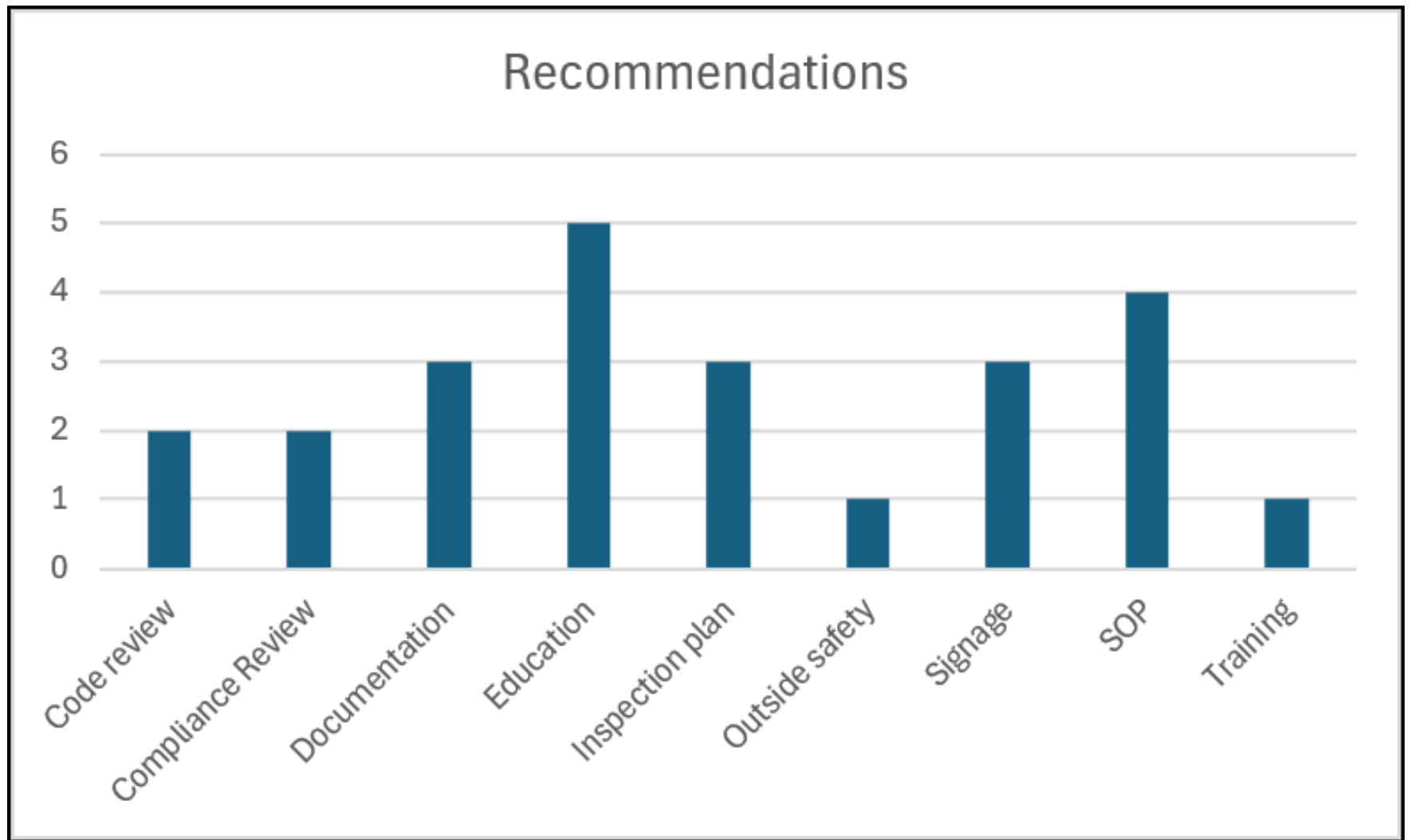
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- Substation Design, Construction and Inspections
- Distribution Design, Construction and Inspections
- Vegetation Management
- Pole Inspection
- Joint Pole Use/Ownership Operations
- Call Handling Practices and Procedures
- Downed Wire Dispatch Procedures
- Public Safety and Awareness
- Contractor Safety Review and Evaluation

# Preparation & Execution

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- The CMLP Senior Leadership Team discussed this assessment several times and gathered documentation and policies to send to AEGIS prior to the assessment.
- At least three staff members escorted the Assessor around for 2.5 days.



# Recommendation Categories

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- Add signage on substation perimeter fencing
- Add signage with CMLP contact information

## **Signage examples**

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# Inspection plan examples

- Consider adding inspection plans for:
  - Overhead distribution system
  - Pad-mounted equipment
  - Wooden pole



- Consider providing education to:
  - School-aged children
  - First responders
  - Construction and maintenance businesses



## **Education examples**

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# Documentation examples

- Use a regular substation inspection form
- Store substation inspection forms
- Utilize work order management system for all issues



- Consider developing SOPs regarding:
  - Reconnection of customer power
  - Tagging rejected wooden poles
  - Trouble call dispatching



**SOP examples**

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# Final takeaways and action items

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- AEGIS provided a form to track all recommendations.
- Staff have already begun taking into consideration all recommendations.
- We have a tracker that includes attributes about each recommendation.
- Staff spent a tremendous amount of time on this, and it has only increased the safety and professionalism of our operations. Thank you!